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**AGENDA
CITY OF CREVE COEUR
CITY COUNCIL MEETING
300 N NEW BALLAS ROAD
Monday, June 10, 2013
7:00 PM**

CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

INVOCATION

ROLL CALL

COMMENTS FROM THE GENERAL PUBLIC

(Citizens are asked to limit comments to three minutes and to complete a speaker card)

PUBLIC HEARING - Public Hearing for the FYE 2014 Budget

ACCEPTANCE OF AGENDA

ANNOUNCEMENTS

The City Council meets the 2nd and 4th Monday of each month

6:00 p.m. – 7:00 p.m. – Work Session

7:00 p.m. – Regular Meeting of the City Council

1. CONSENT AGENDA

a. Council Minutes dated May 28, 2013

BILLS PAYABLE REPORT

For Information Only

Summary: A report of bills payable dated June 4, 2013 in the amount of \$444,340.45 has been provided for Council review. No vote is required.

UNFINISHED BUSINESS

2. Bill No. 5422 - An Ordinance To Amend And Adopt The 2009 International Building Code As The City's New Building Code For Commercial Structures. Final Reading and Passage

Summary: This proposed building code regulates building construction for and within structures such as office buildings, churches, temples, theaters, restaurants, schools, hospitals, shopping centers and warehouses. The city's present commercial building code is the 2003 edition of the International Building Code. St. Louis County and many municipalities within St. Louis County have already adopted this building code as their commercial building code. The building division is recommending that the



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City of Creve Coeur do the same. Bill was deferred at the May 28, 2013 Council Meeting. Request to defer until Monday, June 24, 2013.

3. Bill No. 5423 - An Ordinance To Adopt The 2009 International Energy Conservation Code As The City's New Energy Conservation Code. Final Reading and Passage

Summary: This code regulates the design and construction of residential and commercial buildings for the effective use of energy. Many municipalities within St. Louis County have adopted this energy conservation code as their new energy conservation code. The building division is recommending the City of Creve Coeur do the same. Bill was deferred at the May 28, 2013 Council Meeting. Request to defer until Monday, June 24, 2013.

4. Bill No. 5424 - An Ordinance To Amend And Adopt The 2009 International Residential Code For One- And Two-Family Dwellings As The City's New Residential Building Code. Final Reading and Passage

Summary: This proposed building code regulates the construction, alteration, movement, enlargement, replacement, repair, location and demolition of detached one- and two-family dwellings and townhomes not more than 3 stories in height with a separate means of egress. Residential dwelling units more than 3 stories in height or that share a means of egress are regulated by the 2009 IBC. The city's present residential building code is the 2003 edition of the International Residential Code. St. Louis County and many municipalities within St. Louis County have already adopted this building code as their residential building code. The building division is recommending that the City of Creve Coeur do the same. Bill was deferred at the May 28, 2013 Council Meeting. Request to defer until Monday, June 24, 2013.

5. Bill No. 5425 - An Ordinance Amending Sections 240.020 Of The Creve Coeur Code Of Ordinances Pertaining To Ice Rental Fees. Final Reading and Passage

Summary: This ordinance will amend section 240.020 to allow for an increase in hourly ice rental fees effective September 1, 2013.

NEW BUSINESS



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6. Bill No. 5426 - An Ordinance Approving A Final Subdivision Plat For A Subdivision Known As 222 North Mason Road, City Of Creve Coeur, St. Louis County, Missouri. First Reading

Summary: An application has been submitted by The Enclave at Bellerive, LLC, for approval of a final plat of a subdivision known as 222 N. Mason Road north of Ladue Road and east of Mason Road. Final plat of 222 North Mason Road conforms to the preliminary plat approved by the Planning and Zoning Commission on November 5, 2012. Review and approval of final subdivision plats is a ministerial act; if the drawings are largely the same as the preliminary plat that was already approved, and it is technically accurate, it must be approved by the Planning Commission and City Council.

7. Bill No. 5427 - An Ordinance Amending The Adopted 2012-2013 General And Enterprise Funds Budgets Of The City Of Creve Coeur By Authorizing Additional Appropriations And Unappropriations From Operating Departments. First Reading

Summary: An ordinance to amend the FY 2012-2013 General and Enterprise Fund Budgets.

8. Bill No. 5428 - An Ordinance Adopting The Annual Budget Of The City Of Creve Coeur For The Fiscal Year 2014 Commencing July 1, 2013 And Appropriating Funds Pursuant Thereto. First Reading

Summary: An ordinance to adopt the City of Creve Coeur Fiscal Year 2014 budget.

BUSINESS FROM THE MAYOR and CITY COUNCIL

9. For the Love of Creve Coeur

Summary: Mayor Glantz will review the June 1 community workshop.

BUSINESS FROM CITY ADMINISTRATOR

10. Artistic Bus Shelter

Summary: Staff will review the artistic bus shelter as approved by the Planning and Zoning Commission at their June 3 meeting. The shelter will be installed on Olive Boulevard adjacent to the St. Lukes Urgent Care Center, near Old Ballas Road.

Pursuant to Section 610.022 RSMo., the City Council could, at any time during the meeting, vote to close the public meeting and move to closed session to discuss



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matters relating to litigation, legal actions and/or communications from the City Attorney as provided under Section 610.021(1) RSMo. and/or personnel matters under Section 610.021(13) RSMo. And/or employee matters under Section 610.021(3) RSMo. and/or real estate matters under Section 610.021(2) or other matters as permitted by Chapter 610.

Posted: _____ posted 6/6/13

Deborah Ryan, MRCC
City Clerk



**MINUTES
CITY OF CREVE COEUR
CITY COUNCIL MEETING
300 N NEW BALLAS ROAD
Tuesday, May 28, 2013
7:30 PM**

CALL MEETING TO ORDER

A regular meeting of the City Council of the City of Creve Coeur was called to order by Mayor Glantz at the Creve Coeur Government Center, 300 N New Ballas Road on Tuesday, May 28, 2013.

PLEDGE OF ALLEGIANCE

Mayor Glantz led the Pledge of Allegiance.

INVOCATION

Mayor Glantz gave the invocation.

ROLL CALL

Mayor Glantz	Mayor
Mrs. Kramer	Council Member Ward I
Mr. Kreuter	Council Member Ward I
Mr. Hoffman	Council Member Ward III
Mr. Saunders	Council Member Ward IV
Mrs. Rhoades	Council Member Ward IV

* - ABSENT: Council Members Lawrence, Wang and D'Alfonso

COMMENTS FROM THE GENERAL PUBLIC

(Citizens are asked to limit comments to three minutes and to complete a speaker card)

Council Member Rhoades submitted a letter for the record. (Exhibit A)

Scott Simon resident of 704 Country Manor Lane spoke in opposition of the "For the Love of Creve Coeur" seminar that will take place on Saturday, June 1, 2013.

ACCEPTANCE OF AGENDA

Council Member Hoffman moved, seconded by Council Member Saunders to accept the agenda as presented, with the vote upon such motion being as follows, to-wit:

Council Member Kramer – Aye
Council Member Hoffman – Aye
Council Member Saunders – Aye
Council Member Rhoades – Aye
Council Member Kreuter – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried.

ANNOUNCEMENTS



CITY OF CREVE COEUR – MINUTES
CITY COUNCIL MEETING
Tuesday, May 28, 2013
7:30 PM

The City Council meets the 2nd and 4th Monday of each month
6:00 p.m. – 7:00 p.m. – Work Session
7:00 p.m. – Regular Meeting of the City Council

FUTURE PUBLIC HEARINGS

Monday, June 10, 2013 - 7:00 p.m. Public Hearing for the FYE 2014 Budget

1. CONSENT AGENDA

Council Member Rhoades moved, seconded by Council Member Saunders to approve the consent agenda.

a. Council Minutes dated May 13, 2013

Mayor Glantz called to question the approval of the consent agenda as presented, with the vote upon such motion being as follows, to-wit:

Council Member Kreuter – Aye
Council Member Rhoades – Aye
Council Member Saunders – Aye
Council Member Hoffman – Aye
Council Member Kramer – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried.

BILLS PAYABLE REPORT

For Information Only

Summary: A report of bills payable dated May 21, 2013 in the amount of \$483,373.81 has been provided for Council review. No vote is required.

UNFINISHED BUSINESS

2. Bill No. 5420 - An Ordinance Authorizing The Issuance Of A New Conditional Use Permit For A 1,500 Square-Foot Pizza Takeout And Delivery Only, Limited-Service Restaurant Located At 11032 Olive Boulevard Within The Graeser Square Shopping Center. Final Reading and Passage

City Clerk read Bill No. 5420 for the final time.

Council Member Hoffman moved, seconded by Council Member Saunders to approve Bill No. 5420, with the vote upon such motion being as follows, to-wit:

Council Member Rhoades – Aye
Council Member Kreuter – Aye
Council Member Kramer – Aye
Council Member Hoffman – Aye



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Council Member Saunders – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried. Bill No. 5420 becomes Ordinance No. 5303.

3. Bill No. 5421 - An Ordinance Correcting Certain Shopping Center Parking Regulations In Chapter 405.820, Article VII Off-Street Parking And Loading Regulations, Of The Zoning Ordinance Of The Code Of Ordinances Of The City Of Creve Coeur, Missouri. Final Reading and Passage

City Clerk read Bill No. 5421 for the final time.

Council Member Hoffman moved, seconded by Council Member Saunders to approve Bill No. 5421, with the vote upon such motion being as follows, to-wit:

Council Member Saunders – Aye
Council Member Rhoades – Aye
Council Member Kreuter – Aye
Council Member Hoffman – Aye
Council Member Kramer – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried. Bill No. 5421 becomes Ordinance No. 5304.

4. Bill No. 5422 - An Ordinance To Amend And Adopt The 2009 International Building Code As The City's New Building Code For Commercial Structures. Final Reading and Passage

City Clerk read Bill No. 5422 for the final time.

Council Member Hoffman moved, seconded by Council Member Saunders to approve Bill No. 5422.

Mark Perkins stated there is a proposed amendment to change the effective date to July 1, 2013 so that all of the builders can be made aware of the changes.

Council Member Hoffman moved, seconded by Council Member Kramer to amend Bill No. 5422 by changing the effective date to July 1, 2013, with the vote upon such motion being as follows, to-wit:

Council Member Saunders – Aye
Council Member Hoffman – Aye
Council Member Kramer – Aye
Council Member Rhoades – Aye



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Council Member Kreuter – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried.

Council Member Saunders stated there are three different ordinances for approval tonight and asked what the implications would be if one of them is not approved tonight.

Steve Unser stated they are companion codes and reference each other and would need to be adopted and go into effect simultaneously.

Council Member Kreuter stated he has some additional concerns about the residential code and doesn't feel they can be addressed in this meeting. Council Member Kreuter stated he would like to see a committee appointed or the Building Code Board of Appeals to look further into the HBA proposals and have some additional thought put into the code.

Council Member Kreuter moved, seconded by Council Member Saunders to move Item 6, Bill No. 5424 up on the agenda to discuss immediately, with the vote upon such motion being as follows, to-wit:

Council Member Kreuter – Aye
Council Member Rhoades – Aye
Council Member Saunders – Aye
Council Member Hoffman – Aye
Council Member Kramer – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried.

5. Bill No. 5423 - An Ordinance To Adopt The 2009 International Energy Conservation Code As The City's New Energy Conservation Code. Final Reading and Passage

6. Bill No. 5424 - An Ordinance To Amend And Adopt The 2009 International Residential Code For One- And Two-Family Dwellings As The City's New Residential Building Code. Final Reading and Passage

City Clerk read Bill No. 5424 for the final time.

Council Member Hoffman moved, seconded by Council Member Saunders to approve Bill No. 5424.

Mayor Glantz disclosed again for the record that he is a member of the HBA and AIA.



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Steve Unser stated the Bills being considered tonight are to adopt the 2009 version/edition of the International Code for One and Two family dwelling homes, the energy code, and the commercial code. The Building Division has gone through the process of notification back in December of 2012. The rough drafts were posted on the city's website; in the lobby here at City Hall and copies mailed to the Building Code Board of Appeals, HBA, Chamber of Commerce and other interested parties. The city went through a 90 day public comment/question period. Staff did receive comments from various individuals and organization, one of which was the HBA. Building Division did meet with the HBA back on March 13, 2013 and discussed some of the recommendations that they made to amend the residential building code proposal. The meeting lasted for approximately two and a half hours. In exhibit C the Council can find the HBA recommendations and the Building Division's response to each of those recommendations. The first reading for the rough drafts was to appear back in April and HBA requested and received a delay so that they could have more time to look at additional information they wanted to provide, which they did at the May 13, 2013 meeting. On April 3, 2013 the Building Division met with members of the Building Code Board of Appeals and at that meeting members were given all of the public comments and the Building Division responses. Per exhibit A, the Building Code Board of Appeals members recommended approving the ordinance as proposed by city staff. The Building Division recommends that the three proposed ordinance be adopted as written. Steve Unser stated the codes that are being proposed for adoption have been through a model code process at the national level and all interested parties and stakeholders attend these hearing that are held twice a year. Each proposed change is given to a committee, where it is discussed, recommendations are made and then the body of the International Code Council and membership votes on each and every code change. There has been a pretty exhaustive process already to get to where we are now with the written code. The Building Division has always recommended trying to adopt the code as written and published. There are often amendments and most are in Chapter 1, which are administrative in nature so that is not unusual for jurisdictions to do that. Other amendments are made to be consistent with state laws that have been passed and also to make changes to be consistent with other codes St. Louis County enforces in our city. The city makes recommendations to some of the sections to be more restrictive than what the code says and never makes recommendations to be less restrictive than the minimum standard than the code that has been written and published. In reading the HBA's comments and some other comments, the Building Division felt that these recommendations were less restrictive than the minimum standard code.

Robert Kent resident of 13084 Fern Trails Lane stated he suggested the Council to go ahead and pass the codes since the city doesn't have the inspectors to make the inspections. The County inspectors are the ones that will be taking care of the inspections. There are no inspectors for the city to cover plumbing, electrical and mechanical. This is an issue that was brought up back in December of 2010. Council is going to approve the codes and anyone that applies for a permit will have to get four permits and eight possible inspections. This doesn't make any sense that the city is just giving away \$150,000 to \$200,000 a year in permit fees. It



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is anti business and anti residential. No one wants to pull permits from the city because it takes three months and eight inspections to get it completed. If the city doesn't want to do that the state has a statute that under section 67.280 that will train and certify the inspectors through the State of Missouri. Mr. Kent stated he doesn't like the city inspectors running around in private vehicles, because it give the perception that they are sneaking around looking for jobs without permits. The Building Department needs to be modernized, brought up to date and get with it.

Martin Jaffe resident 12173 Winrock stated he is present as a resident, builder and member of the HBA. HBA is requesting a delay in the vote and was unaware until tonight that all three codes had to be passed at one time. HBA is against the 2009 RCC being adopted as written. Very few cities in the area adopt these codes as written. If these are passed as presented, the City of Creve Coeur will have the most restrictive codes in the area and that will force builders to go to other cities because of the cost.

Steve Unser stated before the Council tonight is not to adopt the County's mechanical, electrical and plumbing codes and yes, the city does contract with St. Louis County to complete commercial mechanical, electrical and plumbing permits to make those inspections. Mr. Unser stated that the city also contracts with the County to do our residential electrical and plumbing permits and subsequent inspections. Regarding Mr. Kent's super inspector concept, the Building Department did respond to that a couple of years ago, and that it is unreasonable to expect one inspector to have a complete knowledge of all these codes simultaneously. Mr. Unser stated he did speak with the City of Kirkwood regarding the super inspector concept and they do not have one inspector that can do everything. It is broken down among staff. In addition, City of Kirkwood inspectors are not certified by the ICC to do all of the inspections. There would be a concern to realistically, comprehensively and competently enforce all the codes through one individual. Steve Unser stated regarding Mr. Jaffe's comments, the code writing process is very lengthy with code changes every three years. Proposed code changes occur all the time and they are looked at thoroughly and completely. Attending these National Code hearings, are code officials, fire marshals, architects, engineers and special interest groups and they are all stake holders in this process. The city has already gone through the 90 day comment/question period, looked at every comment that has been submitted to the Building Division and responded accordingly. The recommendations by HBA, if you look at them one by one, for the most part they are less restrictive than the minimum standard code is asking the contractor or home owner to do. That is essentially why Building Division staff disapproved the recommendations.

Mark Perkins asked Mr. Unser to comment on the Building Board Code of Appeals discussion regarding these proposed ordinances.

Steve Unser stated the Board discussed all three adopting ordinance, the IBC, IECC and the IRC and comments were made available to each member. Only four of the five members were present and met in the evening of April 3, 2013 and discussed many of these recommendations



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at length. Some of the city's amendments were discussed and the HBA's comments were also discussed. Members felt that the best route to take was to adopt the IRC, IBC and the IECC as written and recommended by staff.

Council Member Saunders asked about the composition of the members of the Building Code Board of Appeals.

Steve Unser stated there are two architects who are licensed by the State of Missouri, a vice president of a construction company, union electrician and an attorney.

Council Member Saunders asked if there was any representation of the HBA actually at that meeting making their case for their amendments.

Steve Unser stated no.

Mayor asked what is the pleasure of the Council?

Council Member Kreuter stated he is still in favor of a full vetting process.

Council Member Hoffman asked how long should this process take.

Council Member Kreuter stated his motion would be to table until the committee can address the issues and have a full vetting.

Martin Jaffe asked if the City of Creve Coeur make their own inspections.

Steve Unser stated yes, the city has one residential inspector and two commercial inspectors who can also complete residential.

Martin Jaffe asked if the city should consider adopting a code that is the same as St. Louis County code if they are the ones that are going to be making our inspections.

Council Member Saunders asked how will the HBA respond to all of the time and vetting that has already been spent on this process and what will the delay do?

Martin Jaffe stated to allow for HBA to really sit down with the committee and staff and review their comments and recommendations.

Council Member Hoffman asked if four weeks was enough time.

Martin Jaffe stated yes.

Mark Perkins encouraged the Council to use a standing committee.



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Tuesday, May 28, 2013
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Council Member Kreuter moved, seconded by Council Member Kramer to defer Items 4, 5 and 6 until June 10, 2013 for further review of the IRC only, by the Board of Building Appeals, with participation of the HBA and other interested parties.

Robert Kent asked if the County inspectors are doing the inspecting then those inspectors are not checking the Creve Coeur codes.

Fran Cantor resident of 11700 Terrytown suggested to continue these applications until there are more Council Members present.

Mayor Glantz called the question to defer Items 4, 5 and 6 for the IRC only, until June 10, 2013, with the vote upon such motion being as follows, to-wit:

Council Member Saunders – Aye
Council Member Hoffman – Aye
Council Member Kramer – Aye
Council Member Rhoades – Aye
Council Member Kreuter – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried.

NEW BUSINESS

7. Bill No. 5425 - An Ordinance Amending Sections 240.020 Of The Creve Coeur Code Of Ordinances Pertaining To Ice Rental Fees. First Reading

City Clerk read Bill No. 5425 for the first time. This item was explained during the budget work session.

8. Resolution No. 1058 - A Resolution Of The City Council Of The City Of Creve Coeur, Missouri Authorizing The Execution Of A Contract With George Butler Associates, Inc., For Professional Engineering Design Services Related To The Reconstruction Of Chasselle Lane For The Amount Of \$35,500.00.

City Clerk read Resolution No. 1058.

Council Member Hoffman moved, seconded by Council Member Saunders to approve Resolution No. 1058.

Carl Lumley stated there is a revised copy of the contract on the dais which corrects language regarding the copyright and allows the city to retain copies of materials delivered by the engineers.



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Council Member Hoffman moved, seconded by Council Member Saunders to amend Resolution No. 1058 with the revised contract, with the vote upon such motion being as follows, to-wit:

Council Member Rhoades – Aye
Council Member Kreuter – Aye
Council Member Kramer – Aye
Council Member Hoffman – Aye
Council Member Saunders – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried.

Mayor Glantz called to question to approve Resolution No. 1058 as amended, with the vote upon such motion being as follows, to-wit:

Council Member Rhoades – Aye
Council Member Kreuter – Aye
Council Member Kramer – Aye
Council Member Hoffman – Aye
Council Member Saunders – Aye

The vote on the motion being 5 ayes and 0 nays, motion carried.

BUSINESS FROM THE MAYOR and CITY COUNCIL

9. Trash and Recycling Public Forum

Mayor Glantz stated staff did another presentation along with the HEB committee who has really done an excellent job as well as a brief presentation by Mr. Kent. The city has done a wonderful job of publicizing the fact that our trash and recycling contract is up in July of 2014 and that we are trying to get as much citizen input as possible before awarding the next contract. This is the single biggest item that the city contracts and it is as important as ever to collect as much citizen input into this issue. There were a number of Council Members that attended both forums and the citizens that were there were engaged. Mayor Glantz stated we need to get more citizen input and encouraged all Council Members to hold a Town Hall meeting and have this as a discussion item on that agenda for that meeting. This is a very important contract.

BUSINESS FROM CITY ADMINISTRATOR

Council Member Hoffman moved, seconded by Council Member Kreuter to adjourn at 9:54 p.m., with the vote upon such motion being as follows, to-wit:

Council Member Rhoades – Aye
Council Member Kramer - Aye
Council Member Saunders – Aye



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Council Member Hoffman – Aye

Council Member Kreuter - Aye

The vote on the motion being 5 ayes and 0 nays, motion carried.

Submitted by:

Deborah Ryan
City Clerk

Barry Glantz
Mayor



City of Creve Coeur
300 N. New Ballas Road
Creve Coeur, Missouri 63141
(314) 432-6000
www.creve-coeur.org

DATE: June 4, 2013

TO: Mark Perkins, City Administrator

FROM: Daniel Smith, Director of Finance

SUBJECT: Bills Payable

For your information and transmittal to the City Council, is a list of bills payable dated June 4, 2013 in the amount of \$444,340.45.



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

NO DEPT - NO DIV

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00084	0		3828262423	29-May-13	COCA-COLA	VENDING SODA-GARAGE	01-00-00-4739	171.54
00364	0	P001648	1171394-IN	13-May-13	GULF STATES DISTRIBUTORS	AE40R3 FED .40 CAL. PRACTICE AMMO	01-00-00-2411	1,140.00
01323	0		038841000	16-May-13	INDOX SERVICES	COPIES OF PLANS	01-00-00-4729	72.74
00189	0	P001647	130.	15-May-13	MIRIKITANI & ASSOCIATES	COACHING AND COMMUNICATION	01-00-00-2411	100.00
00189	0	P001647	130.	15-May-13	MIRIKITANI & ASSOCIATES	SCENARIO BASED TRAINING	01-00-00-2411	300.00
00189	0	P001647	130.	15-May-13	MIRIKITANI & ASSOCIATES	COACHING FOR OFFICER 4 SESSION	01-00-00-2411	600.00
Sum of Invoices								2,384.28



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

LEGISLATIVE

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00303	0		10319449	20-May-13	MISSOURI LAWYERS MEDIA	PUB HRG NOTICE	01-11-13-6260	160.08
Sum of Invoices								160.08



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

Administration

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
00053	0		66936	20-May-13	MERCY CORPORATE HEALTH	PREPLACEMENT PHYSICAL	01-12-11-6271	95.00	
							Sum of Invoices		95.00



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

IT

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00007	0		379-619825	28-May-13	BATTERIES PLUS - 270	BATTERIES FOR UPS BACKUP	01-12-51-6213	138.30
00073	0		CD93440	09-May-13	CDW-G	4 EA VIEWSONIC MONITORS	01-12-51-6213	459.96
00050	0		INV0028851	15-May-13	REJIS	PIX FIREWALL MAINTENANCE	01-12-51-6213	21.24
00070	0		I120105306	05-Jan-12	TECH ELECTRONICS	REFUB HANDSET-PHONE MAINT.	01-12-51-6213	26.43
Sum of Invoices								645.93



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

MUNICIPAL COURT

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
01232	0		97739252	17-May-13	MOORE MEDICAL	GLOVES FOR SECURITY SEARCHES	01-13-14-9503	20.89	
							<i>Sum of Invoices</i>		20.89



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

INTERDEPARTMENTAL

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00118	0	P001651	14503	21-May-13	OLD STYLE BODY COMPANY	REPAIR 2408 DUE TO COLLISION	01-13-15-6220	834.85
01169	0		3200199717	13-May-13	STAPLES ADVANTAGE	TONER-P.D.	01-13-15-7312	241.53
01169	0		3200199718	13-May-13	STAPLES ADVANTAGE	TONER, STAPLES, STAPLER-COURT	01-13-15-7312	408.72
01169	0		3200199719	14-May-13	STAPLES ADVANTAGE	TONER-COURT	01-13-15-7312	133.39
01169	0		3200199720	14-May-13	STAPLES ADVANTAGE	INKJET CARTRIDGES-PUB WKS	01-13-15-7312	125.50
00045	0		657294747001	14-May-13	OFFICE DEPOT	FOLDERS, ENVELOPES FOR P.D.	01-13-15-7312	33.09
00045	0		656673898001	08-May-13	OFFICE DEPOT	PENS, HANGING VIEW BINDERS	01-13-15-7312	44.89
00046	0		2109691	16-May-13	OFFICE ESSENTIALS	25 CASES 8.5 X 11 PAPER	01-13-15-7312	835.75
00077	0		2628529	13-May-13	QUILL	TONER	01-13-15-7312	61.19
01922	0		4356871	08-Mar-13	OFFICE DEPOT CREDIT PLAN	MEMORY CARDS	01-13-15-7312	29.94
01922	0		646518765001	20-Feb-13	OFFICE DEPOT CREDIT PLAN	CHAIRMAT	01-13-15-7312	127.99
01169	0		3200626224	25-May-13	STAPLES ADVANTAGE	TONER P.D.	01-13-15-7312	166.20
Sum of Invoices								3,043.04



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

COMMUNITY SERVICES

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00413	0		25676	22-May-13	FASTSIGNS	CHANGES TO 5K RUN BANNER	01-14-11-6281	50.00
01639	0		8319	13-May-13	MURPHY'S LAWN CARE	MEMORIAL TREE MILLENNIUM PARK	01-14-11-7304	<u>250.00</u>
Sum of Invoices								300.00



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

ICE ARENA

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
01550	0		452-6099312	21-May-13	ARAMARK UNIFORM SERVICES	CLEANING SUPPLIES (052113)	06-14-31-7301	0.88
01550	0		452-6124377	28-May-13	ARAMARK UNIFORM SERVICES	CLEANING SUPPLIES (0528/13)	06-14-31-7301	0.88
01550	0		452-6099312	21-May-13	ARAMARK UNIFORM SERVICES	UNIFORMS (052113)	06-14-31-7308	3.96
01550	0		452-6124377	28-May-13	ARAMARK UNIFORM SERVICES	UNIFORMS (052813)	06-14-31-7308	3.96
00078	0		00093854	14-May-13	BECKER ARENA PRODUCTS	DASHER GLASS/KICK PLATE REPLAC	06-14-31-6212	312.75
00080	0		2580-147-5	24-May-13	DIERBERGS	BIRTHDAY CAKE	06-14-31-7304	21.99
00080	0		457-149-5	03-May-13	DIERBERGS	BIRTHDAY CAKE	06-14-31-7304	21.99
00082	0		0712081	22-May-13	METROLIFT PROPANE	PROPANE FOR OLYMPIA	06-14-31-7307	119.76
00048	0		201569	28-May-13	PAVYER	OLYMPIA BLADE SHARPENING	06-14-31-6211	80.95
00086	0		305060395	06-May-13	SYSCO FOOD	GENERAL SUPPLIES	06-14-31-7304	58.99
00973	0		425160	30-Apr-13	US FIGURE SKATING	US FIGURE SKATING REGISTRATION	06-14-31-6262	12.00
Sum of Invoices								638.11



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

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GOLF MAINTENANCE

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00197	0		96750	13-May-13	FOSTER MECHANICAL CORP.	HYDRAULIC HOSE/FITTINGS KUBOTA	06-14-32-6211	13.00
00066	0		000217549	06-May-13	FROESEL OIL	CLEAR DIESEL & UNLEADED GAS	06-14-32-7307	1,206.27
00081	0		9133600214	03-May-13	GRAINGER	CAP SCREWS	06-14-32-6212	11.49
00081	0		9133600214	03-May-13	GRAINGER	SPRAY PAINT	06-14-32-7301	8.51
01415	0		0007866	13-May-13	GREENSPRO, INC.	PRE EMERGENCE HERBICIDE GREENS	06-14-32-7303	486.00
00439	0		92836	06-May-13	HEAVY DUTY EQUIPMENT	CAP, FUEL PIPE CLEANER TRIMMER	06-14-32-6211	36.65
00458	0		27094581	13-May-13	LAFARGE NORTH AMERICA, INC.	TOP DRESSING SAND	06-14-32-6212	636.86
00173	0		110898	10-May-13	SUPREME TURF PRODUCTS	HERBICIDE ROUGHS & LIMESTONE G	06-14-32-7303	444.00
00173	0		110897	10-May-13	SUPREME TURF PRODUCTS	HERBICIDE & CALCIUM	06-14-32-7303	564.00
Sum of Invoices								3,406.78



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

PRO SHOP

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
00224	0		3288	20-May-13	METROPOLITAN AMATEUR GOLF ASSOCIATION	USGA GHIN HANDICAP SERVICE	06-14-33-6202	612.00	
01098	0		229943	07-May-13	ALL STAR PRO GOLF	GOLF PENCILS	06-14-33-7304	184.68	
00119	0		1657846	07-May-13	TITLEIST	RESALE	06-14-33-8324	124.00	
00222	0		980449	16-May-13	HORNUNG'S PRO GOLF SALES INC	SPECIAL ORDER REDEL	06-14-33-8327	59.55	
01098	0		230173	17-May-13	ALL STAR PRO GOLF	TEES FOR RESALE	06-14-33-8327	156.99	
Sum of Invoices									1,137.22



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

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SNACK BAR

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
01550	0		452-6099312	21-May-13	ARAMARK UNIFORM SERVICES	WIPING TOWELS (052113)	06-14-34-7301	3.58
01550	0		452-6124377	28-May-13	ARAMARK UNIFORM SERVICES	WIPING TOWELS (052813)	06-14-34-7301	3.58
00084	0	P001579	3868353328	21-May-13	COCA-COLA	SODA FOR RESALE (8317)	06-14-34-8317	752.05
00222	0		980449	16-May-13	HORNUNG'S PRO GOLF SALES INC	CUP DISPENSER	06-14-34-7304	44.00
00116	0		5609	13-May-13	SAM'S CLUB	FOOD FOR RESALE	06-14-34-8315	34.92
00116	0		5609	13-May-13	SAM'S CLUB	SNACKS FOR RESALE	06-14-34-8319	149.69
00086	0	P001580	3051590852	15-May-13	SYSCO FOOD	FOOD FOR RESALE (8315)	06-14-34-8315	224.94
00086	0	P001580	305060395	06-May-13	SYSCO FOOD	FOOD FOR RESALE (8315)	06-14-34-8315	371.67
00086	0		305060395	06-May-13	SYSCO FOOD	PAPER PRODUCTS	06-14-34-8321	298.97
Sum of Invoices								1,883.40



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

BUILDING MAINTENANCE

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
01550	0		452-6124376	28-May-13	ARAMARK UNIFORM SERVICES	UNIFORM RENTAL (5/28/13)	01-16-11-7308	7.92	
01550	0		452-6097311	21-May-13	ARAMARK UNIFORM SERVICES	UNIFORM RENTAL (5/21/13)	01-16-11-7308	7.92	
00102	0		750630	20-May-13	BEYERS LUMBER	ELECTRICAL COVERS	01-16-11-6212	3.57	
00081	0		9149092554	22-May-13	GRAINGER	SENSOR WALL SWITCH	01-16-11-6212	77.95	
00164	0		033728A	23-May-13	NEW SYSTEM CARPET & BUILDING CARE	AIR FRESHENERS	01-16-11-7301	348.94	
00164	0		033728	20-May-13	NEW SYSTEM CARPET & BUILDING CARE	CLEANING CHEMICALS	01-16-11-7301	195.51	
Sum of Invoices									641.81



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

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POLICE-ADMIN

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
01068	0		105813	14-May-13	DNT	QTRLY COPIER MAINT-CHIEF'S OFF	01-21-11-6213	110.00
00125	0		293335	16-May-13	LEON UNIFORM	BADGE WARRANTY WORK-CLEANED	01-21-11-7308	20.00
00053	0		68667	20-May-13	MERCY CORPORATE HEALTH	HEP B 3RD DOSE FOR OFFICER	01-21-11-6271	68.00
00050	0	P001462	INV0028851.	15-May-13	REJIS	SUBSCRIPTION FEES MAY 2013	01-21-11-6202	4,030.39
00050	0	P001497	INV28851...	15-May-13	REJIS	CHARTER CONN/ROUTER MAINT MAY	01-21-11-6202	855.00
00050	0		INV0028851	15-May-13	REJIS	IMDS ORACLE DB MAINT	01-21-11-6202	21.00
00050	0		INV0028851	15-May-13	REJIS	LIVESCAN CONNECTION	01-21-11-6202	50.00
00050	0	P001498	INV0028851..	15-May-13	REJIS	GLOBAL SOFTWARE SVCS MAY 2013	01-21-11-6213	1,102.50
00050	0	P001498	INV0028852	16-May-13	REJIS	RETIRE FRID BADGE	01-21-11-6213	7.50
01520	0		14918	20-May-13	SECURE DOCUMENT DESTRUCTION	ANNUAL RECORD DESTRUCTION	01-21-11-6202	449.00
01436	0	P001471	13-004	16-Apr-13	WEST CENTRAL DISPATCH CENTER	4TH QTR UTILIZATION FEE	01-21-11-6202	83,698.00
Sum of Invoices								90,411.39



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

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POLICE-INVESTIGATIONS

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00732	0		034321	29-May-13	BIBLE, NICOLE	MEMBERSHIP FEES FOR BIBLE	01-21-21-6262	30.00
00125	0		293820	20-May-13	LEON UNIFORM	1 DETECTIVE BADGE	01-21-21-7308	134.50
00050	0		INV0028851	15-May-13	REJIS	IMDS ORACLE DB MAINT	01-21-21-6202	10.50
00298	0		0122987-IN	20-May-13	SIRCHIE	EVIDENCE BOXES	01-21-21-7304	<u>73.19</u>
							Sum of Invoices	248.19



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

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POLICE-PATROL

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00426	0	P001603	26163	23-May-13	ADGRAPHIX	GRAPHICS & INSTALL ON 3 VEHICL	01-21-22-6210	1,134.00
01592	0		115680	16-May-13	CPR-PRO-COM, INC.	(1) PRS SHEARS; 25 CPR MASKS	01-21-22-6271	153.40
00094	0		163126	20-May-13	FIRESTONE	CAR 2411 REPLACE RF HEADLIGHT	01-21-22-6210	54.39
00094	0		163464	30-May-13	FIRESTONE	CAR 2406 WATER PUMP REPLCMNT	01-21-22-6210	373.73
00347	0		481402	17-May-13	KUSTOM SIGNALS, INC.	REPAIR RADAR UNIT	01-21-22-6211	419.20
01232	0		97739245	17-May-13	MOORE MEDICAL	25 4" TRAUMA DRESSING	01-21-22-6271	145.25
00050	0		INV0028851	15-May-13	REJIS	14 VERIZON DATA LINES	01-21-22-6253	686.00
01906	0	P001640	23973	07-May-13	TACTICAL MEDICAL SOLUTIONS	SHIPPING	01-21-22-6271	9.00
01906	0	P001640	23973	07-May-13	TACTICAL MEDICAL SOLUTIONS	40 EA SOFT TACTICAL TOURNIQUET	01-21-22-6271	803.60
Sum of Invoices								3,778.57



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

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PUBLIC WORKS

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
00303	0		10294020	18-Apr-13	MISSOURI LAWYERS MEDIA	REQ FOR BIDS-ARENA MECH SVCS	01-31-11-6260	453.60	
01048	0		9704866617	13-May-13	VERIZON WIRELESS	AIR CARD 4/14 TO 5/13/13	01-31-11-6253	<u>40.01</u>	
							Sum of Invoices		493.61



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

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STREETS

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
01550	0		452-6124374	28-May-13	ARAMARK UNIFORM SERVICES	MOP RENTAL (5/28/13)	01-31-41-6212	8.91
01550	0		452-6097309	21-May-13	ARAMARK UNIFORM SERVICES	MOP RENTAL (5/21/13)	01-31-41-6212	8.91
01550	0		452-6124374	28-May-13	ARAMARK UNIFORM SERVICES	UNIFORM RENTAL (5/28/13)	01-31-41-7308	43.00
01550	0		452-6097309	21-May-13	ARAMARK UNIFORM SERVICES	UNIFORM RENTAL (5/21/13)	01-31-41-7308	43.00
00693	0		265763	09-May-13	BMC ENTERPRISES, INC.	BLOCKS FOR LEAF SITE	01-31-41-6212	600.00
00693	0		265988	10-May-13	BMC ENTERPRISES, INC.	BLOCKS FOR EAST LEAF SITE	01-31-41-6212	600.00
00693	0		265987	07-May-13	BMC ENTERPRISES, INC.	BLOCKS FOR EAST LEAF SITE	01-31-41-6212	600.00
00693	0		265986	06-May-13	BMC ENTERPRISES, INC.	BLOCKS FOR EAST LIFE SITE	01-31-41-6212	400.00
00010	0		927347	23-May-13	BRANNEKY HARDWARE	WHEEL BARROW HANDLES	01-31-41-7302	18.99
00010	0		927386	24-May-13	BRANNEKY HARDWARE	SMALL TOOLS	01-31-41-7302	40.97
00010	0		927077	20-May-13	BRANNEKY HARDWARE	STAPLES FOR NO PARKING SIGNS	01-31-41-7305	11.37
00010	0		927384	24-May-13	BRANNEKY HARDWARE	CREDIT MEMO-MDSE RETURN	01-31-41-7311	-29.99
00010	0		927273	23-May-13	BRANNEKY HARDWARE	SUPPLIES FOR PGA SIGNS	01-31-41-7311	153.27
00013	0		1763-210843	20-May-13	CARQUEST AUTO PARTS	OIL FILTERS	01-31-41-6210	8.34
00874	0		ARSI00012959	15-May-13	INDEPENDENT CONCRETE PIPE CO	IRON GRATES, STONE-DRAIN REPAIR	01-31-41-7305	491.00
01136	0		64751359	21-May-13	JOHN DEERE LANDSCAPES	PARTS FOR IRRIGATION REPAIR	01-31-41-6211	71.00
01136	0		64752558	21-May-13	JOHN DEERE LANDSCAPES	IRRIG REPAIRS-FOUNTAIN PARK	01-31-41-6211	358.60
00209	0		171928/1	09-May-13	KIRKWOOD MATERIAL SUPPLY	FESCUE SOD	01-31-41-7305	45.05
00156	0		55937	20-May-13	L & C TRUCK REPAIR, INC.	DIAGNOSIS/REPAIR TRK 205	01-31-41-6210	832.09
00156	0		55740	07-May-13	L & C TRUCK REPAIR, INC.	REPAIR POWER INVERTOR TRK 103	01-31-41-6210	240.70
00156	0		55849	17-May-13	L & C TRUCK REPAIR, INC.	DIAGNOSTICS/REPAIR TRK 310	01-31-41-6210	1,324.11
00164	0		033652	20-May-13	CARE LTD.	CACL3 FOR SIDEWALKS	01-31-41-7310	849.00
00165	0		TI-0261829	20-May-13	NEWMAN TRAFFIC SIGNS	GUARDRAIL POST CAPS	01-31-41-7311	107.25
00865	0	P001642	235454	01-May-13	OUTDOOR SOLUTIONS	MOW 270/OLIVE INTERCHANGE APR	01-31-41-6212	480.00
00047	0		W36304	15-May-13	PAT KELLY EQUIPMENT	REPAIR OF HAMMER DRILL	01-31-41-6211	51.45
00809	0		124222	05-Mar-13	RED BUD SUPPLY, INC.	CONES FOR STREET PROJECTS	01-31-41-7305	537.50
00300	0		INV-294827	25-May-13	SEILER INSTRUMENT & MFG. CO., INC.	SIGN STAKES FOR PGA GOLF TOURN	01-31-41-7311	205.00
00300	0		INV-294579	20-May-13	SEILER INSTRUMENT & MFG. CO., INC.	STAKES FOR SIGNS-PGA EVENT	01-31-41-7311	82.00
00896	0		69410	16-May-13	SHAPIRO SALVAGE & SUPPLY CO.	STEEL PLATE-CURB INLET	01-31-41-7305	312.00
00562	0		21517	26-May-13	TRAFFIC CONTROL COMPANY	RENTAL ROAD CLOSED SIGNS	01-31-41-7311	720.00



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

STREETS

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
00104	0		S16312	20-May-13	VERMEER	LIMB CHIPPER REPAIRS	01-31-41-6211	1,575.02
00311	0		1628051	22-May-13	WEBER CHEVROLET	TRANSMISSION LINES TRK 206	01-31-41-6210	40.10
Sum of Invoices								10,828.64



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

HEALTH & WELFARE

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
00105	0	P001463	0346-015352548.	15-May-13	REPUBLIC SERVICES	RESIDENTIAL SERVICE MAY 2013	01-31-42-6214	80,972.60	
00105	0	P001463	0346-015250270	31-Mar-13	REPUBLIC SERVICES	CONDO SERVICE APRIL 2013	01-31-42-6214	1,793.41	
00105	0	P001463	0346-015338821	30-Apr-13	REPUBLIC SERVICES	CONDO SERVICE MAY 2013	01-31-42-6214	1,793.41	
00105	0	P001464	0346-015352548	15-May-13	REPUBLIC SERVICES	RECYCLING SERVICE MAY 2013	01-31-42-6217	<u>23,443.40</u>	
							Sum of Invoices		108,002.82



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

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PARKS

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount
01550	0		452-6124374	28-May-13	ARAMARK UNIFORM SERVICES	UNIFORM RENTAL (5/28/13)	01-31-43-7308	43.00
01550	0		452-6097309	21-May-13	ARAMARK UNIFORM SERVICES	UNIFORM RENTAL (5/21/13)	01-31-43-7308	43.00
00102	0		750076	13-May-13	BEYERS LUMBER	ITEMS FOR BRIDGE RECONS-MT PRK	01-31-43-6212	108.56
00102	0		750153	14-May-13	BEYERS LUMBER	ITEMS FOR BRIDGE RECONS-MT PRK	01-31-43-6212	16.97
00141	0		124950	24-May-13	ELECTRO BATTERY	BATTERY FOR MOWER	01-31-43-6211	78.93
00141	0		124951	24-May-13	ELECTRO BATTERY	CREDIT MEMO-JUNK RETURNS	01-31-43-6211	-9.00
00023	0		336344	21-May-13	FRED WEBER	STONE FOR WASHOUT ALONG PATH	01-31-43-6212	348.49
00023	0		325436	16-May-13	FRED WEBER	STONE-PATH REPAIR MILL PARK	01-31-43-6212	222.60
00023	0		325892	17-May-13	FRED WEBER	STONE FOR PATH REPAIR-MILL PK	01-31-43-6212	1,034.39
01136	0		64751320	21-May-13	JOHN DEERE LANDSCAPES	SPRAY GUN FOR TANK	01-31-43-6211	92.63
00209	0		173154/1	22-May-13	KIRKWOOD MATERIAL SUPPLY	STONE FOR MEMORIAL TREE-MILLPK	01-31-43-6212	16.32
00209	0		173147/1	22-May-13	KIRKWOOD MATERIAL SUPPLY	COMPOST-TAPPMAYER HOUSE	01-31-43-6212	62.85
00209	0		172040/1	10-May-13	KIRKWOOD MATERIAL SUPPLY	SAND FOR MALCOLM TERR PARK	01-31-43-6212	183.60
00209	0		171928/1	09-May-13	KIRKWOOD MATERIAL SUPPLY	MULCH	01-31-43-7303	80.25
00040	0		807126	16-May-13	MILBRADT	PART FOR SPRAYER ENGINE	01-31-43-6211	4.99
00042	0		1102490	13-May-13	MPR SUPPLY	ITEMS FOR FOUNTAIN PARK	01-31-43-6212	42.38
00042	0		1102860	16-May-13	MPR SUPPLY	VALVES FOR SPLASH PAD	01-31-43-7302	64.12
01639	0		8320	13-May-13	MURPHY'S LAWN CARE	REPLACE MEMORIAL TREE-CH	01-31-43-6212	250.00
00865	0	P001646	235454.	01-May-13	OUTDOOR SOLUTIONS	ROW MOWING APRIL 2013	01-31-43-6212	955.49
00110	0		314664	22-May-13	RICMAR INDUSTRIES	PARK SUPPLIES	01-31-43-6212	361.63
00173	0		IN111144	17-May-13	SUPREME TURF PRODUCTS	CHEMICALS FOR WEEDS	01-31-43-7301	221.00
00173	0		IN111181	17-May-13	SUPREME TURF PRODUCTS	WEED SPRAY FOR R.O.W.	01-31-43-7301	197.50
00173	0		IN111252	21-May-13	SUPREME TURF PRODUCTS	GRASS SEED	01-31-43-7303	154.00
00173	0		IN110959	13-May-13	SUPREME TURF PRODUCTS	CHEMICALS FOR PARKS	01-31-43-7303	975.00
00593	0	P001641	17814	28-May-13	THE GREENWOOD GROUP LLC	PARKS MOWING MAY 2013	01-31-43-6212	5,152.00
00109	0		449750	14-May-13	WESTPORT POOLS	CHEMICALS FOR SPLASH PAD	01-31-43-7301	75.06
Sum of Invoices								10,775.76



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

COMMUNITY DEVELOPMENT - PLANNING

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
01334	0		40186	07-Dec-12	GEORGE BUTLER ASSOCIATES, INC.	ENG SVCS-DELMAR TRAFFIC STUDY	01-32-11-6260	1,445.00	
00213	0		1119121	20-May-13	MCLAUGHLIN COURT REPORTING SERVICES	CRT RPTR FOR BOA ON 5/16/13	01-32-11-6202	<u>187.50</u>	
							Sum of Invoices		187.50



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

COMMUNITY DEVELOPMENT - BUILDING

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
01048	0		9704371018	04-May-13	VERIZON WIRELESS	INSPECTORS TABLETS APR 2013	01-32-61-6253	<u>72.02</u>	
							Sum of Invoices		72.02



CITY OF CREVE COEUR
ACCOUNTS PAYABLE LISTING

6/4/2013

CAPITAL IMPROVEMENTS

Vendor Number	Address Number	Purchase Order	Invoice Number	Invoice Date	Vendor Name	Description	GL Account	Invoice Amount	
01934	0	P001634	PAY #1	30-May-13	AMCON MUNICIPAL CONCRETE	LADUE RD SIDEWALK IMP-PAY #1	02-61-71-9510-13605	167,789.10	
00013	0		1763-210995	22-May-13	CARQUEST AUTO PARTS	OIL FOR SHOVELS FOR ASPHALT	02-61-71-9510-13601	35.91	
01132	0		R14874	16-May-13	CMW EQUIPMENT	RENTAL OF ROLLER FOR MICRO-PRP	02-61-71-9510-13601	175.00	
00788	0	P001563	31799	30-Apr-13	DON BROWN CHEVROLET	2013 CHEVROLET 2500 CREW CAB	02-61-71-9516	25,214.00	
00049	0		35748	29-May-13	EMPLOYEE STAFFING GROUP	TEMP PERSONNEL-MICRO PREP	02-61-71-9510-13601	1,512.00	
00049	0		35734	22-May-13	EMPLOYEE STAFFING GROUP	TEMP PERSONNEL MICRO PREP	02-61-71-9510-13601	1,606.50	
01880	0	P001576	E31388	28-Feb-13	FDH ENGINEERING, INC.	ENERGY AUDIT-PAY #3	02-61-71-9501-13101	7,000.00	
00023	0		326686	22-May-13	FRED WEBER	MICRO PREP-TOWNSEND	02-61-71-9510-13601	295.00	
00023	0		327039	23-May-13	FRED WEBER	MICRO-PREP/TOWNSEND	02-61-71-9510-13601	236.00	
00023	0		325483	16-May-13	FRED WEBER	MICRO PREP BEACON HILL/TOWNSND	02-61-71-9510-13601	295.00	
01357	0		58025A	19-Mar-13	KUHLMANN DESIGN GROUP INC	PRINTING COSTS FOR SURVEY	02-61-71-9510-13705	93.87	
00100	0		28887	23-May-13	MISSOURI PETROLEUM	ASPHALT TACK FOR MICRO PREP	02-61-71-9510-13601	300.00	
00411	0		103891	30-May-13	N.B. WEST CONTRACTING CO.	ASPHALT PATCH	02-61-71-9510-13601	184.80	
00047	0		P00193	15-May-13	PAT KELLY EQUIPMENT	TOOLS/MATERIALS FOR MICRO PREP	02-61-71-9510-13601	448.23	
Sum of Invoices									205,185.41
GRAND TOTAL OF ALL INVOICES									444,340.45

AN ORDINANCE REPEALING ARTICLE II, BUILDING CODE, OF CHAPTER 500 OF THE CITY CODE OF ORDINANCES OF THE CITY OF CREVE COEUR, AND ENACTING IN LIEU THEREOF A NEW ARTICLE II, BUILDING CODE.

WHEREAS, the city regulates construction practices and standards by means of technical codes to protect the health, safety and welfare of its citizens, and

WHEREAS, such codes must be updated from time to time, and

WHEREAS, at least one copy of the 2009 International Building Code, which is hereby to be adopted by reference, has been filed with the City Clerk's office and made available for public use, inspection and examination for a period of at least 90 days prior to adoption of this ordinance pursuant to Section 67.280 RSMo and notice thereof has been publicly posted, and

WHEREAS, a copy of this ordinance has been available for public inspection in the City Clerk's office and it has been read two times by the City Council as required by the City's Charter prior to adoption.

NOW, THEREFORE, be it ordained by the City Council of the City of Creve Coeur, Missouri as follows:

SECTION 1: ARTICLE II, BUILDING CODE, of Chapter 500 of the City Code of Ordinances is hereby repealed and a new ARTICLE II of Chapter 500 is hereby enacted to be known as "THE BUILDING CODE". Said ARTICLE to read as follows:

ARTICLE II. BUILDING CODE

SECTION 500.020 ADOPTED: A certain document, a copy of which is on file in the office of the City Clerk, such copy being marked and designated as the "INTERNATIONAL BUILDING CODE, 2009", FOURTH EDITION, including "APPENDIX H – SIGNS", as published by the International Code Council, Inc., is hereby adopted as the Building Code of the City of Creve Coeur, Missouri, for the control of building and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions, and terms of the INTERNATIONAL BUILDING CODE, 2009, FOURTH EDITION, are hereby referred to, adopted and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes, prescribed in this Article.

SECTION 500.030 JURISDICTIONAL TITLES: Throughout the INTERNATIONAL BUILDING CODE, 2009, FOURTH EDITION, wherever the terms "name of jurisdiction" or "local jurisdiction" appear, it shall be deemed to mean "City of Creve Coeur, Missouri". Likewise, wherever the terms "department of building inspection" or "department of building safety" appear, it shall be deemed to mean "Creve Coeur Building Division". Wherever the term "code" appears, it shall mean the INTERNATIONAL BUILDING CODE, 2009, FOURTH EDITION, as amended in this Article.

**SECTION 500.040 AMENDMENTS TO CHAPTER 1 INTERNATIONAL BUILDING CODE:
– CHAPTER 1 – ADMINISTRATION:**

Chapter 1 of the International Building Code, 2009, Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

101.4.2 Mechanical. The provisions of the St. Louis County Mechanical Code, as adopted by the city, shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration

systems, incinerators and other energy-related systems. All references to the International Mechanical Code shall be interpreted as references to the adopted St. Louis County Mechanical Code.

This amendment made to clarify that the city's mechanical code is the St. Louis County Mechanical Code.

101.4.3 Plumbing. The provisions of the St. Louis County Plumbing Code, as adopted by the city shall apply to the installation, alteration, repair and replacement of plumbing systems including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system. All references to the International Plumbing Code shall be interpreted as references to the adopted St. Louis County Plumbing Code.

This amendment made to clarify that the city's plumbing code is the St. Louis County Plumbing Code.

102.7 Matters not provided for. Any requirements that are essential for the structural, fire or sanitary safety of an existing or proposed building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code, shall be determined by the building official.

This amendment made to add a new section to this code so as to be consistent with the city's present building code.

104.6.1 Interference with building official: No person shall hinder, obstruct, resist, fail to provide entry at reasonable times, or otherwise interfere with the code official in the performance of his official duties.

This amendment made to add a new section to this code so as to be consistent with the city's present building code.

104.6.1.1 Disasters. In the event of a disaster such as a windstorm, tornado, flood, fire, earthquake, bomb blast or explosion, the building official is authorized to deputize Missouri Structural Assessment and Visual Evaluation (SAVE) Volunteer Inspectors certified by the Missouri State Emergency Management Agency (SEMA) to conduct emergency post-disaster safety evaluations of buildings.

This amendment made to add a new section to this code that allows the building official to expand the city's inspection capabilities after a disaster. This is consistent with St. Louis County's building code adopting ordinance.

104.12 Rule-making authority. The building official shall have authority, as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this code, to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules shall not have the effect of waiving structural or fire performance requirements specifically provided for in this code or of violating accepted engineering practice involving public safety.

This amendment made to add a new section to this code so as to be consistent with the city's present building code.

105.1.1 Annual permit. [Delete this section in its entirety]

The city contracts with St. Louis County to issue annual mechanical, electrical and plumbing permits to qualified tradespersons employed by building owners.

105.1.2 Annual permit records. [Delete this section in its entirety]

See reason for deleting Section 105.1.1

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. Retaining walls which are not over 2 feet (610mm) in height measured from the top of the proposed finished grade at the non-retained side of the wall to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.
2. Painting, tiling, carpeting and similar finish work.
3. Prefabricated swimming pools accessory to a Group R-3 occupancy which have a maximum water depth of 24 inches (610mm), a maximum water volume of 5,000 gallons (18925L) and are installed entirely above ground.

Electrical:

Any work exempted from permits by the Electrical Code.

Gas:

Any work exempted from permits by the Mechanical Code.

Mechanical:

Any work exempted from permits by the Mechanical Code.

Plumbing:

Any work exempted from permits by the Plumbing Code.

This amendment made to clarify when permits are not required.

105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced, or after one year from the date of issuance for tenant improvements, or after two years from the date of issuance for new buildings or building additions if the permit has not otherwise expired. The building official is authorized to grant, in writing, one or more extensions of time, for periods not to exceed 90 days each. An extension shall be requested in writing and justifiable cause must be demonstrated.

The city's present building code allows commercial building permits to be valid for up to two years regardless of the type of project. This amendment will limit the time frame for completing tenant improvements to one year instead of two years. New buildings and additions will still have two years to complete.

105.5.1 Expiration of demolition permits. Demolition work shall be completed within thirty (30) days after the date of issuance of the demolition permit. The building official may, after receiving a written request from the applicant, grant one or more thirty day extensions to this permit if the applicant presents evidence of justifiable cause.

This amendment made to reflect the city's present requirements.

105.7 Placement of permit and inspection placard. The building permit or copy shall be kept on the site of the work until the completion of the project. An inspection placard shall be posted on the job site in accordance with Section 110.1.1 of this code.

This amendment was made to add new section 105.7 so as to be consistent with the city's present building code.

107.1 General. The application for a permit shall be accompanied by four (4) complete sets of construction documents drawn to scale. The construction documents and site plans shall be prepared and sealed by an architect or an engineer licensed and registered in the State of Missouri to render this service. All construction documents and site plans shall be prepared by the appropriate registered design professional consistent with the professional registration laws of the State of Missouri. All construction documents submitted with an application for a building permit shall bear an original embossed or wet ink seal and an original dated signature of the responsible Missouri registered design professional for each discipline on the front sheet of each discipline within each set of construction documents. In addition, all other sheets of the construction documents, other than the specifications or calculations, shall bear the original embossed or wet ink seal and the original dated signature or the mechanically reproduced seal and dated signature of the responsible Missouri registered design professional. Any addenda or modifications submitted for changes to the construction documents shall also bear the original seal and original dated signature of the responsible Missouri registered design professional. Such changes shall

be clearly indicated. The building official may waive these requirements when the scope of the work is of a minor nature and does not involve structural alterations.

This amendment made to reflect the city's present requirements.

107.2.3 Means of egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. The construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

This amendment made to delete the exceptions made to occupancies in groups R-2 and I-1. St. Louis County made the same amendment.

107.2.5.2 All buildings and structures. For all buildings and structures for all use groups to be constructed, the following additional information shall be shown on the site plan.

- A. The location of all front, side and rear building lines, together with all easements including utilities, drainage and roadways.
- B. The present and proposed finished grades of yards, driveways or walks for drainage in relation to the established first floor elevation including the slope away from the foundation.
- C. The lot number, block (if any), plat or subdivision number, recorded subdivision name, front street and side streets (where applicable) and the north direction arrow.

107.2.5.3 Private sewage disposal system. The site plan shall indicate the location of a private sewage system when a public sewage system is not available. All technical data and soil data required by the Plumbing Code shall be submitted with the site plan.

107.2.6 Residential Fire Sprinkler Option Form. An application for permit for a one or two family dwelling or residence or townhome shall be accompanied by the city's Residential Fire Sprinkler Option Form signed by the builder and the purchaser affirming that a fire sprinkler system was offered to the purchaser prior to entering into the purchase contract in conformance with Section 903.1 of this code. If there is no purchaser at the time of the permit application submittal, then said signed FORM shall be submitted as soon as there is a purchaser and prior to the issuance of a certificate of occupancy for the new residence. The provisions of this section shall expire on December 31, 2019.

This amendment was made to be consistent with state law.

107.3.1 Approval of construction documents. When the building official issues a permit, the construction documents shall be approved in writing or by stamp, as "Reviewed for Code Compliance". Two (2) sets of construction documents so approved shall be retained by the building official. The other two (2) approved sets shall be returned to the applicant for submittal to the respective fire district for their approval. Upon their approval, the fire district shall return one (1) set of city and fire district-approved construction documents to the applicant. This set shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

109.2 Schedule of fees. The fees for plan reviews, issuing permits, making inspections, working overtime, issuing certificates of occupancy, establishing escrow funds and other administrative enforcement activities performed by the building department shall be paid in accordance with the fees established in Appendix B to Title IV, Community Development and Public Works Fee Schedule, of the City Code of Ordinances.

109.2.1 Building Code Board of Appeals filing fee. A filing fee of \$150.00 shall be paid upon the submittal of the written appeal in order for a quorum of the Building Code Board of Appeals to be notified to convene for the purpose of hearing an appeal of a decision of the building official as set forth in Section 112. The filing fee shall be refunded to the applicant if the Board reverses the decision of the building official.

109.3 Building permit valuations. The applicant for a permit shall provide an estimated construction cost for the project at the time of application. The estimated construction cost shall be for the total value of work, including

materials, labor, profit and overhead for all structural, architectural, mechanical, electrical and plumbing work, as it relates to the project for which the permit is to be issued. The estimated construction cost shall not include the cost of land or registered design professional fees. If, in the opinion of the building official, the estimated construction cost is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. Final building permit valuation shall be set by the building official.

109.4 Work commencing before permit issuance. Where any work for which a permit is required by this code is started, or proceeded with, prior to obtaining said permit, the normal applicable fee shall be doubled and a penalty fee of up to \$500.00 may be charged by the building official. The payment of said doubled fee or penalty shall not relieve any persons from fully complying with the requirements of this code or from other penalties prescribed herein.

109.6 Refunds. In the case of revocation of a permit no refund shall be granted. Any excess fee for a project that has not been commenced shall be returned to the permit holder upon written request received no later than twelve (12) months after the date the permit was issued and the permit shall be cancelled. All plan examination fees, permit processing fees, inspection fees and penalties that have been imposed upon the permit holder under the requirements of this code shall be deducted from the refund or paid by the permit holder prior to any refund being granted.

These amendments were made to Sections 107.2.5.2 through 109.6 to reflect the city's present requirements.

110.1.1 Inspection placard. Work requiring a permit shall not commence until the permittee or his/her agent posts a city-issued inspection placard at the job site for recording inspections. Failure to maintain this inspection placard will not relieve the permittee of responsibility as provided by this code. When work has progressed to a point of having windows, or when the job is an alteration or addition, the placard shall be attached to the glass in view for recording the balance of inspections required by the code. Absence of inspection placard shall result in the imposition of a penalty fee as set forth in Section 109.2.

110.1.2 Manufacturer's installation instructions. Manufacturer's installation instructions, as required by this code, shall be available at the job site at the time of inspection.

110.3 Required inspections. After issuing a building permit, the building official shall conduct inspections as set forth in Sections 110.3.1 through 110.3.12 during and upon completion of the work for which a permit has been issued so as to be able to ensure that substantial compliance with this code has occurred. A record of all such inspections and any violations of this code shall be maintained by the building official. The owner shall provide for special inspections in accordance with Section 1704.

110.3.1 Soil and footing inspection: A soil inspection shall be made after excavation for the building or structure is complete and trenches for footings, spread footings, column pads, grade beams, and other types of footings are crumbed, formed, have the reinforcing steel tied in place, and are ready for concrete. A City-approved barrier shall be in place around the excavation until backfilling has occurred. No concrete shall be placed without this inspection.

110.3.1.1 Lowest floor elevation. Any building or structure permitted to be constructed on property designated as a flood hazard area shall have an elevation certification (as required by Section 1612.5 and prepared and sealed by a registered design professional) which certifies the lowest floor elevation, including the basement, submitted to the building official prior to the required foundation inspection. No foundation inspection shall be approved until said submittal is made.

110.3.2 Foundation inspection: A foundation inspection shall be made after the top of the footing has been cleaned, the foundation forms have been properly set, the reinforcing steel has been cleaned and tied in place, and the proper anchor bolts are on site. A City-approved barrier shall be in place around the excavation until backfilling has occurred. No concrete shall be placed without this inspection.

110.3.3 Pier inspection: A pier inspection shall be made where special foundations such as drilled and poured-in-place concrete piers, caissons, driven piles of all types, and other extraordinary types of foundations are required. Additional pier inspections shall be made when the code official determines the size of the project warrants it. The code official may require a special inspector, as set forth in Section 1704, to make these inspections when deemed necessary by the building official. Reinforcing steel required in the above cases shall be placed to allow for adequate inspections. A City-approved barrier shall be placed around the excavation until backfilling has occurred. No concrete shall be placed without this inspection.

110.3.4 Structural concrete slab and under-floor inspection. Structural concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the sub-floor.

110.3.5 Framing inspection: A framing inspection shall be made after the plumbing, mechanical, electrical and fire rough-in inspections have been made and approved by those inspection departments and their dated approval signatures have been noted on the posted inspection placard; and after all masonry walls, fireplace chimneys, vents, and all framing (including the floor, wall, and roof structures, fireblocking, bracing and sheathing) are completed. Protection of joints and penetrations in fire-resistance rated assemblies shall not be concealed from view until inspected and approved. No mechanical, electrical, plumbing, or framing systems shall be concealed before this inspection is made and approved by the code official.

110.3.6 Ceiling cover inspection. A ceiling cover inspection shall be made after the plumbing, mechanical, electrical and fire rough-in inspections have been made and approved by those inspection departments and their dated approval signatures have been noted on the posted inspection placard; and after all masonry walls, fireplace chimneys, vents, ceiling grid and hanger wires, and all framing (including the floor and/or roof structures, fireblocking, bracing and sheathing) are completed. Protection of joints and penetrations in fire-resistance rated assemblies shall not be concealed from view until inspected and approved.

110.3.7 Gypsum board and plaster: The following ceiling and wall gypsum board or plaster inspections shall be performed as specified:

- A) A lath inspection shall be made after all lathing, interior and exterior, is in place and before any plaster is applied.
- B) A gypsum board inspection shall be made after all gypsum board sheets are in place and properly fastened and before any joint compound is applied over joints and fasteners.

Each layer of a multi-layered fire-resistance rated assembly shall be inspected and approved prior to the next layer being applied. Protection of joints and penetrations in fire-resistance rated assemblies shall not be concealed from view until inspected and approved.

110.3.8 Fire- and smoke-resistant penetrations. Protection of joints and penetrations in fire-resistance-rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.

110.3.9 Energy efficiency inspections. Inspections shall be made to determine compliance with Chapter 13 of this Code and shall include, but not be limited to, inspections for envelope insulation R- and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency.

110.3.10 Supplemental inspections. In addition to the inspections specified above, the building official is authorized to make or require other inspections or re-inspections of any construction work to ascertain compliance with the provisions of this code, the city's zoning code and the city's code of ordinances.

110.3.11 Special inspections. For special inspections, see Section 1704.

110.3.12 Final inspection. A final building inspection shall be made after the prior required inspections have been completed and the final mechanical, electrical, and plumbing inspections have been made and approved by those inspection departments; and the final fire inspection has been made and approved by the appropriate fire district.

These amendments were made to Sections 110.3.1 through 110.3.12 to be more specific in content. The more specific language as to when inspections are required and what the inspector will be looking for will assist contractors with the field inspection process.

110.5.1 Duty to request a final inspection and obtain final approval: Upon completion of the work described in the permit application and on the approved construction documents, the permit holder shall request a final inspection and obtain final approval before any occupancy of the building or structure shall occur. Failure of the permit holder to make a timely request for a final inspection and obtain final approval shall constitute a violation of the building code, shall subject the permit holder to penalties as set forth in Section 114.4, and shall result in forfeiture to the City of any funds deposited in escrow in connection with the permit if the failure continues after 30 days written notice sent by certified mail to the last known address of the permit holder, in order to offset at least some of the costs incurred by the City as a result of such continuing failure. The building official shall be responsible for sending such notices, including to all permit holders that have failed to make a timely request for a final inspection as of the effective date of these provisions. Unless the permit holder applies in signed writing for segregated investment of its escrow deposit at the time of permit application, an escrow deposit may be invested by the City with other municipal funds and any income derived there from may be used for general revenue purposes at any time. If the permit holder applies by timely signed writing for segregated investment of its escrow deposit, the City shall segregate such funds and invest them in the same manner as allowed for municipal funds, to the extent practicable given the amount of the escrow; however, no return is assured and the City shall have no liability whatsoever other than to pay any income actually derived from such investment in the event of return of such escrow deposit. In the event of a forfeiture of an escrow deposit, any income from segregated investment shall also be forfeited.

110.7 Coordination of inspections. Whenever in the enforcement of this code or another code or ordinance, the responsibility of more than one code official of the jurisdiction is involved, it shall be the duty of the code officials involved to coordinate their inspections and administrative orders as fully as practicable. Whenever an inspector from any agency or department observes an apparent or actual violation of some provision of some law, ordinance or code not within the inspector's authority to enforce, the inspector shall report the findings to the code official having jurisdiction.

These amendments were made to Sections 110.5.1 and 110.7 to reflect the city's present requirements.

111.1 New buildings: Any building or structure hereafter constructed shall not be used or occupied in whole or in part until the certificate of occupancy shall have been issued by the code official. The person in whose name the building permit has been issued pursuant to Section 105 shall obtain the certificate of occupancy and shall prevent the occupancy of any building or structure or part thereof until such certificate is issued to him. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

111.1.1 Existing buildings: Upon written request from the owner or prospective tenant of an existing building or structure, the code official shall issue a certificate of occupancy, provided that there are not violations of law, or this code, or orders of the code official pending, or which are found to exist upon an inspection of the building, and it has been established after inspection and investigation that the alleged occupancy is also in conformance with the Zoning Ordinance of Creve Coeur, Missouri. This code shall not require the removal, alteration, or abandonment of, or prevent the continuance of, the occupancy of a lawfully existing building or structure, unless such use is deemed to endanger public safety and welfare. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

111.1.2 Residential occupancy. The requirements of Section 111.1.1 shall not be applicable to existing one- and two-family residential buildings and structures that were previously issued certificates of occupancy prior to the effective date of Section 111.1.

111.1.3 Required certificate of occupancy. Failure of the owner or tenant of a structure to obtain a certificate of occupancy as required by Sections 111.1 and 111.1.1 shall be deemed a violation of this code and shall subject said owner or tenant to penalties as set forth in Section 114.4.

111.4 Revocation of the certificate of occupancy: The certificate of occupancy shall always be subject to this code and other laws enforced by the building official. Non-compliance with the regulations of this code and other laws enforced by the building official shall be deemed a violation subject to the penalties set forth herein, and, in addition, the building official shall be empowered to revoke the certificate of occupancy issued for the building in question, until such time as the violations are corrected and the building is in compliance with this code and the Zoning Ordinance of Creve Coeur, Missouri. The issuance of a certificate of occupancy shall not relieve the owner or tenant from compliance with all regulations of this code and other applicable regulations.

111.5 Permanent address numbers: Every dwelling unit or business structure within the City of Creve Coeur shall have the correct street number(s) permanently affixed on said dwelling unit or business structure so as to be clearly visible from the street in front of the property. The street number(s) shall be a minimum of four (4) inches in height when displayed on a dwelling unit and a minimum of six (6) inches in height when displayed on a business structure. Said street numbers shall be contrasting in color to that of the structure and shall be placed in proximity to the main entrance into the structure. Permanent address numbers shall be permanently affixed on a dwelling unit or a business structure prior to the issuance of a certificate of occupancy.

These amendments were made to Sections 111.1 through 111.5 to reflect the city's present requirements.

113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there is and shall remain a Building Code Board of Appeals. The board shall adopt rules of procedure for conducting its business.

113.2 Limitations on authority. Any person shall have a right to appeal a decision of the building official to the Building Code Board of Appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent form of construction is proposed. The board shall have no authority to waive requirements of this code.

113.3 Time limitation and filing procedure. All appeals shall be filed in writing with the building official. A written appeal may not be filed more than thirty days after the affected individuals are notified of the building official's decision.

113.3.1 Filing fee. An application for appeal shall not be filed without full payment of the filing fee as set forth in Section 109.2.1. Said filing fee shall be refunded to the applicant if the Board reverses the decision of the building official.

113.4 Membership of board. The Building Code Board of Appeals shall consist of five regular members, who shall be residents of the City of Creve Coeur, appointed pursuant to Section 4.4(i) of the City Charter for three-year staggered terms. To the extent possible, based on applications submitted to the City, members of the Building Code Board of Appeals should be representative of the following professions or disciplines: registered architects, builder or superintendent of building construction with ten years of experience, structural engineer, code enforcement professional, mechanical engineer, electrical engineer, civil engineer, fire protection engineer, mechanical contractor, electrical contractor, plumbing contractor, fire protection contractor, or other disciplines associated with the building trades or design professions.

113.4.2 Chair. The Chair of the Building Code Board of Appeals shall be elected annually by the members of the Building Code Board of Appeals.

113.4.3 Secretary. The City Administrator shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the city administrator.

113.4.4 Compensation of members. Members of the Building Code Board of Appeals shall not be compensated for service but shall be reimbursed for actual expenses pursuant to established City policy.

113.4.5 Code of Ethics for members. All members shall be subject to the city's Code of Ethics.

113.5 Notice of meeting. The Building Code Board of Appeals shall meet upon notice from the chair, within 5 calendar days of the filing of a written appeal with the building official, or at stated periodic meetings.

113.6 Open hearing. All hearings before the Building Code Board of Appeals shall be open to the public. Proper public notice shall be given. The appellant, the appellant's representative, the code official, and any person whose interests are affected shall be given the opportunity to be heard.

113.6.1 Procedure. The Board shall adopt and make available to the public through the secretary procedures under which a hearing shall be conducted. The procedures shall not require compliance with strict rules of evidence but shall mandate that only relevant information be received.

113.7 Quorum. Three members of the Building Code Board of Appeals shall constitute a quorum for the purpose of hearing appeals.

113.8 Board decision. The Building Code Board of Appeals shall only reverse or modify the decision of the code official by a majority vote of the quorum present and voting. Otherwise, the decision shall be deemed to be upheld.

113.8.1 Notification of decision. The secretary of the board shall notify the appellant and the building official of the decision in writing.

113.8.2 Administration. The building official shall take immediate action in accordance with the decision of the board.

113.9 Court review: Any aggrieved person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision of the Building Code Board of Appeals in the office of the City Administrator.

These amendments were made to Sections 113.1 through 113.9 to reflect the city's present requirements.

114.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of an ordinance violation, punishable by a fine of not more than \$500, or by imprisonment not exceeding 90 days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

115.1.1 Mud or debris or an excessive amount of surface water on streets and adjacent properties. After a verbal warning to the owner or contractor, the building official shall have the authority to issue a stop work order to any project which is causing mud or debris or an excessive amount of surface water to be transferred to any street or adjacent property.

115.3 Unlawful continuance. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as set forth in Section 114.4.

These amendments were made to Sections 114.4 through 115.3 to reflect the city's present requirements.

SECTION 117 EMERGENCY MEASURES

117.1 Imminent danger. When, in the opinion of the building official, there is imminent danger of failure or collapse of a building or structure or any part thereof which endangers life, or when any structure or part of a structure has fallen and life is endangered by the occupation of the building or structure, the building official is hereby authorized and empowered to order and require the occupants to vacate the same forthwith. The building

official shall cause to be posted at each entrance to such structure a notice reading as follows: "This Structure is Unsafe and its Occupancy has been Prohibited by the Building Official." It shall be unlawful for any person to enter such structure except for the purpose of making the required repairs or of demolishing the same, which work shall be done at such person's own risk.

117.2 Temporary safeguards. When, in the opinion of the building official, there is imminent danger due to an unsafe condition, the building official may cause the necessary work to be done in an effort to render such structure temporarily safe, whether or not the legal procedure described herein has been instituted. Neither the city or the building official or any other city employee shall be deemed to have guaranteed such security or safety or have any liability related to actions or omissions hereunder.

117.3 Closing streets. When necessary for the public safety, the building official shall temporarily close structures and close, or order the authority having jurisdiction to close, sidewalks, streets, public ways, and places adjacent to unsafe structures, and prohibit the same from being used.

117.4 Emergency repairs. For the purpose of Section 117, the building official shall employ the necessary labor and materials to perform the required work as expeditiously as possible.

117.5 Costs of emergency repairs. Costs incurred in the performance of emergency work shall be paid by the city on approval from the building official. The city attorney of the jurisdiction shall institute appropriate action against the owner of the premises where the unsafe structure is or was located for purpose of recovering such costs and may cause a special tax lien to be placed against the property for such purposes.

These amendments were made to add Sections 117.1 through 117.5 to this code so as to be consistent with the city's present building code. St. Louis County made the same building code amendment.

SECTION 500.050 AMENDMENTS TO CHAPTER 2 INTERNATIONAL BUILDING CODE:

– CHAPTER 2 – DEFINITIONS:

Chapter 2 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the International Fire Code, International Fuel Gas Code, St. Louis County Mechanical Code, St. Louis County Electrical Code, St. Louis County Plumbing Code, International Energy Conservation Code or International Property Maintenance Code, such terms shall have the meanings ascribed to them as in those codes.

This amendment made to correctly identify the city's mechanical, electrical, and plumbing codes.

SECTION 500.060 AMENDMENTS TO CHAPTER 3 INTERNATIONAL BUILDING CODE:

– CHAPTER 3 – USE AND OCCUPANCY CLASSIFICATION:

Chapter 3 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set forth below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

303.1 Assembly Group A-4. Assembly uses intended for viewing of indoor sporting events and activities with spectator seating including, but not limited to:

- Arenas
- Skating Rinks
- Swimming Pools
- Tennis Courts
- Gymnasiums (with spectator seating/bleachers)

This amendment was made to add "Gymnasiums (with spectator seating/bleachers)" for clarification purposes. While Assembly Group A-3 is written to include "Gymnasiums (without spectator seating)", the code is silent on "Gymnasiums (with spectator seating/bleachers)" which should be included in the A-4 group category.

**SECTION 500.070 AMENDMENTS TO CHAPTER 4 INTERNATIONAL BUILDING CODE:
– CHAPTER 4 – SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY:**

Chapter 4 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

415.6.4 Dry cleaning plants. The construction and installation of dry cleaning plants shall be in accordance with the requirements of this code, the St. Louis County Mechanical Code, the St. Louis County Plumbing Code and NFPA 32. Dry cleaning solvents and systems shall be classified in accordance with the International Fire Code.

This amendment was made to reference the city's mechanical and plumbing codes.

**SECTION 500.080 AMENDMENTS TO CHAPTER 5 INTERNATIONAL BUILDING CODE:
– CHAPTER 5 – GENERAL BUILDING HEIGHTS AND AREAS:**

Chapter 5 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

501.2 Address identification. New and existing buildings shall be provided with approved address numbers or letters. Each character shall be a minimum of 4 inches high for dwelling units and 6 inches high for business structures and a minimum of 0.5 inch wide. They shall be installed on a contrasting background and be plainly visible from the street or road fronting the property. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure.

This amendment was made to be consistent with fire districts' requirements.

**SECTION 500.090 AMENDMENTS TO CHAPTER 6 INTERNATIONAL BUILDING CODE:
– CHAPTER 6 – TYPES OF CONSTRUCTION:**

Chapter 6 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

603.1.2 Piping. The use of combustible piping materials shall be permitted when installed in accordance with the limitations of the St. Louis County Mechanical Code and the St. Louis County Plumbing Code.

The amendment to Sections 603.1.2 was made to reference the city's mechanical and plumbing codes.

**SECTION 500.100 AMENDMENTS TO CHAPTER 7 INTERNATIONAL BUILDING CODE:
– CHAPTER 7 – FIRE AND SMOKE PROTECTION FEATURES:**

Chapter 7 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is

hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

Section 713.5 Penetrations in smoke barriers. Penetrations in smoke barriers shall be tested in accordance with the requirements of UL 1479 for air leakage. The air leakage of the penetration assemblies measured at 0.30 inch (7.47 Pa) of water in both the ambient temperature and elevated temperature tests, shall not exceed:

1. 5.0 cfm per square foot (0.025m³ / s x m²) of penetration opening for each through-penetration firestop system; and
2. A total cumulative leakage of 50 cfm (0.024m³ / s) for any 100 square feet of wall area or floor area.

This amendment was made for clarification purposes.

**SECTION 500.110 AMENDMENTS TO CHAPTER 8 INTERNATIONAL BUILDING CODE:
– CHAPTER 8 – INTERIOR FINISHES:**

Chapter 8 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

**SECTION 500.120 AMENDMENTS TO CHAPTER 9 INTERNATIONAL BUILDING CODE:
– CHAPTER 9 – FIRE PROTECTION SYSTEMS:**

Chapter 9 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

903.1 General. Automatic sprinkler systems shall comply with this section. Notwithstanding the provisions of the Building Code and International Building Code, as amended and adopted by the City of Creve Coeur, Missouri, a builder of one or two family dwellings or residences or townhouses shall offer to any purchaser, on or before the time of entering into the purchase contract, the option, at the purchaser's cost, to install or equip fire sprinklers in the dwelling, residence or townhouse. Notwithstanding any other provision of law to the contrary, no purchaser of such dwelling, residence or townhouse shall be denied the right to choose or decline to install a fire sprinkler system in such dwelling, residence or townhouse being purchased. The provisions of this section shall expire on December 31, 2019.

903.2.6.1 Existing Group I. All skilled nursing and intermediate care facilities not required prior to August 28, 2007, to install and maintain an automatic sprinkler system, shall install and maintain an automatic sprinkler system in accordance with NFPA 13 by December 31, 2012, unless the facility receives an exemption from the State of Missouri Department Of Health and presents evidence in writing from a certified sprinkler system representative or licensed engineer that the facility is unable to install an approved NFPA 13 automatic sprinkler system due to the unavailability of water supply requirements associated with this system.

This amendment was made to be consistent with state law.

903.2.10.3 Buildings more than 3 stories in height or having an occupied floor level located 55 feet or more above the lowest level of fire department vehicle access. An automatic sprinkler system shall be installed throughout all buildings that are more than 3 stories above the grade plane or have an occupied floor level located 55 feet or more above the lowest level of fire department vehicle access.

Exceptions: No changes made.

This amendment is similar to those approved when the city adopted the 1984 BOCA National Building Code in 10/1986, the 1990 BOCA National Building Code in 4/1992, the 1993 BOCA National Building Code in 6/1995, the 1999 BOCA National Building Code in 2/2002 and the 2003 International Building Code. These amendments have been made to be consistent with those made by the fire districts that serve the city and is related to the difficulties associated with manual suppression of a fire in multi-story buildings.

[F] 903.3.1.2 NFPA 13 or NFPA 13R sprinkler systems. Where allowed in buildings of Group R, up to and including four stories in height, automatic sprinkler systems shall be installed throughout in accordance with NFPA 13 or NFPA13R.

This amendment was made to give a design professional more flexibility when designing the fire sprinkler system for multistory apartment, condominium and hotel buildings.

[F] 903.3.1.2.2 Combustible attics. Sprinkler protection shall be provided within attics constructed of or containing combustible materials.

This amendment was made as a result of the 7/17/2012 Central West End Apartment fire that destroyed this 4-story apartment building. This fire started in the attic and quickly throughout the attic because of the 'lumberyard' that was located between each line of draftstopping. If this building's attic had been provided with fire sprinklers the result would have been repairs being made instead of demolishing and rebuilding the entire structure. Missouri Baptist College has decided to sprinkler the attics of their Phase 2 dormitory buildings.

[F] 903.3.5 Water supplies. Delete the reference to the "International Plumbing Code" and substitute the "St. Louis County Plumbing Code".

This amendment made to reference the city's plumbing code.

[F] 903.4.1 Monitoring. Alarm, supervisory and trouble signals shall be distinctly different and automatically transmitted to an approved central station, remote supervising station or proprietary supervising station as defined in NFPA 72.

Exceptions: No changes made.

This amendment made to be consistent with the city's present code.

[F] 903.4.2 Alarms. The fire sprinkler system water flow device(s) shall activate alarm notification appliances, located throughout the entire building, which shall be components of an automatic fire alarm system installed in accordance with the provisions of Section 907 and NFPA 72. Such fire sprinkler water flow devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the fire sprinkler system.

Exception: Alarm notification appliances shall not be required for limited area sprinkler systems (see Section 903.3.5.1.1)

See the related proposed amendment for Section 907.2.24.

907.2.24 Buildings equipped throughout with an automatic sprinkler system. An automatic fire alarm system with alarm notification appliances shall be installed and maintained in all new buildings equipped throughout with an automatic sprinkler system that is designed and installed in accordance with Section 903.3.1.1 or Section 903.1.1.2. An automatic fire alarm system with alarm notification devices shall be installed and maintained in all existing unsprinklered buildings that become equipped throughout with an automatic sprinkler system that is designed and installed in accordance with Section 903.3.1.1 or Section 903.3.1.2. An automatic fire alarm system with alarm notification appliances shall be installed and maintained in all existing sprinklered buildings where the construction costs for the proposed renovation of these buildings exceeds 50 percent of their appraised values (as established by the St. Louis County Assessor's Office) prior to the proposed renovations occurring. Manual fire alarm boxes are not required unless otherwise required by Sections 907.2.1 through 907.2.23.

This amendment was made to add a new section to this code. In many cases, the proposed code, as written, only requires an audible bell mounted on an exterior wall to be activated by the building's fire sprinkler system water flow device. This means that there could be a fire some where in a fully sprinklered multi-story office building or retail shopping center or large warehouse and the only occupant notification device activated would be this single, exterior-mounted audible bell. Building occupants could be working or shopping in a building on fire and not be aware of it. The building department views this as a potentially unsafe condition that is not specifically

addressed by the code as written. This proposed amendment would require that a building's fire sprinkler system water flow device activate alarm notification appliances (horn / strobes) located throughout the entire building, thereby alerting all building occupants of a fire condition as soon as it is detected and expediting the evacuation process. See also the amendment to Section 903.4.2. Please note that this amendment was previously approved when the city adopted the 1993 BOCA National Building Code in 6/1995, the 1999 BOCA National Building Code in 2/2002 and the 2003 International Building Code in 5/2007.

907.14 Monitoring. All fire alarm and fire detection systems shall be monitored by an approved central station, remote supervising station or proprietary supervising station as defined in NFPA 72.
Exceptions: No changes made.

This amendment made to be consistent with the amendment made to Section 903.4.1.

**SECTION 500.130 AMENDMENTS TO CHAPTER 10 INTERNATIONAL BUILDING CODE:
– CHAPTER 10 – MEANS OF EGRESS:**

Chapter 10 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

1004.1.1 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.1. For areas without fixed seating, the occupant load shall not be less than the number determined by dividing the floor area under consideration by the occupant per unit of area factor assigned to the occupancy as set forth in Table 1004.1.1 or by the actual number of occupants for whom each occupied space, floor or building is designed, whichever number of occupants is greater.

This amendment was made to be consistent with the city's present building code.

Exception. Delete.

This amendment was made because the exception contains subjective language that would be difficult for the building official to consistently enforce.

1008.1.9.10 Stairway doors.

Exception 3. Delete.

This amendment was made to make this code section consistent with the city's present code. The exception, as written, would permit exit stairway doors to be locked from the stairway side if the stairway served 4 stories or less. The city's present code prohibits all exit stairway doors from being locked from the stairway side because of the concern that persons could enter an exit stairway filling with smoke and then attempt to exit the stairway only to discover that the exit stairway door had closed and locked behind them. This exception was also amended by the 2006 edition of the International Building Code.

1011.1 Where required. Amend "Exception 1" to read as follows:

Exceptions:

1. Exit signs are not required in buildings which require only one exit.

This amendment was made to be consistent with the city's present building code.

1011.5.1 Graphics. Amend the first sentence of this section to read as follows: Every exit sign and directional exit sign shall have plainly legible red letters not less than 6 inches high with the principle strokes of the letters not less than 0.75 inch wide.

No other changes made to rest of this section.

This amendment was made to be consistent with the city's present building code and fire district regulations. Red is the most recognized color for exit signs.

1013.3 Opening limitations. Required guards shall not have openings which allow passage of a sphere 4 inches (102 mm) in diameter from the walking surface to the required guard height. Guards shall not have an ornamental pattern that would provide a ladder effect. Angular intermediate balusters shall be installed at an angle 45 degrees or greater to an adjacent walking surface or stair tread. Exceptions 1 through 6. No changes made.

This amendment was made to make this section consistent with the city's present code as it relates to the 'ladder effect' language. The code as written does not define 'ladder effect'. The proposed language does. This amendment is identical to the amendment approved when the city adopted the 1999 BOCA National Building Code in 2/2002 and the 2003 International Building Code in 5/2007.

1013.7 Retaining walls. Guards shall be provided where retaining walls with differences in grade level on either side of the wall in excess of 30 inches (762 mm) are located closer than 24 inches (610 mm) to a walk, path, parking lot or driveway on the high side of the retaining wall. If deemed in the interest of public safety by the building official per Section 104.12, guards or other approved protective measures shall be provided where retaining walls with differences in grade level on either side of the wall in excess of 30 inches are located 24 inches or farther from a walk, path, parking lot or driveway.

This amendment was made to add a new code section to clarify when guards are required across the top of retaining walls.

1017.4.4 Dead ends in aisles. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in aisles more than 20 feet in length.

Exceptions:

1. In occupancies in Use Group B where aisles are bounded by furniture, counters, partitions or similar dividers not more than 6 feet in height, the length of a dead-end aisle shall not be more than 50 feet.
2. In occupancies in Use Group B where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the length of dead-end aisles shall not exceed 50 feet.
3. A dead-end aisle shall not be limited in length where the length of the dead-end aisle is less than 2.5 times the least width of the dead-end aisle.

This amendment was made to correct an oversight that occurred when the 1999 BOCA National Building Code transitioned to the International Building Code. The 2009 IBC has this language being applicable to corridors only. If this amendment is not made a designer could propose a dead-end aisle between office work stations up to 100 feet in length.

1023.1 General. Exits shall discharge directly to the exterior of the building. The exit discharge shall be at grade or shall provide direct access to grade. The exit discharge shall not reenter a building. The combined use of Exceptions 1 and 2 below shall not exceed 50 percent of the number and capacity of the required exits.

Exceptions:

1. A maximum of 50 percent of the number and capacity of the exit enclosures is permitted to egress through areas on the level of discharge provided all of the following conditions are met:
 - 1.1 Such exit enclosures egress to a free and unobstructed path of travel to an exterior exit door. This free and unobstructed path of travel shall not have any floor dimension less than ten (10) feet in width or length with a minimum floor area of three hundred (300) square feet and a minimum clear ceiling height of eight (8)

feet. This exterior exit door shall be readily visible and identifiable from the point of termination of the exit enclosure.

- 1.2 and 1.3 No change.
2. No change

This amendment was made to establish minimum dimensions for an exit discharge lobby. The code is silent on this issue. This amendment is identical to the one made when the city adopted the 1999 BOCA National Building Code in 2/2002 and the 2003 International Building Code in 5/2007.

**SECTION 500.140 AMENDMENTS TO CHAPTER 11 INTERNATIONAL BUILDING CODE:
– CHAPTER 11 – ACCESSIBILITY:**

Chapter 11 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

Section 1106.5 Van spaces. For every four or fraction of four accessible parking spaces, at least one shall be a van-accessible parking space. Where accessible parking is provided within or beneath a building, at least one van-accessible parking space shall also be provided within or beneath the building adjacent to the other interior accessible parking spaces.

Exception: No change.

This amendment was made to be consistent with state law.

**SECTION 500.150 AMENDMENTS TO CHAPTER 12 INTERNATIONAL BUILDING CODE:
– CHAPTER 12 – INTERIOR ENVIRONMENT:**

Chapter 12 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the St. Louis County Mechanical Code.

This amendment made to reference the city's mechanical code.

1206.3.3 Court drainage. Delete the reference to the “International Plumbing Code” and substitute the “St. Louis County Plumbing Code”.

This amendment made to reference the city's plumbing code.

**SECTION 500.160 AMENDMENTS TO CHAPTER 13 INTERNATIONAL BUILDING CODE:
– CHAPTER 13 – ENERGY EFFICIENCY:**

Chapter 13 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

**SECTION 500.170 AMENDMENTS TO CHAPTER 14 INTERNATIONAL BUILDING CODE:
– CHAPTER 14 – EXTERIOR WALLS:**

Chapter 14 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.180 AMENDMENTS TO CHAPTER 15 INTERNATIONAL BUILDING CODE:

– CHAPTER 15 – ROOF ASSEMBLIES AND ROOFTOP STRUCTURES:

Chapter 15 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

[P] 1503.4 Roof drainage. Delete the reference to the “International Plumbing Code” and substitute the “St. Louis County Plumbing Code”.

This amendment made to reference the city's plumbing code.

SECTION 500.190 AMENDMENTS TO CHAPTER 16 INTERNATIONAL BUILDING CODE:**–CHAPTER 16 – STRUCTURAL DESIGN:**

Chapter 16 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

TABLE 1607.1**MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS AND MINIMUM CONCENTRATED LIVE LOADS**

Modify the following row within this table to read as follows:

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (psf)
5. Balconies(exterior)	100	----
Balconies on one- and two- family residences only, and not exceeding 100 sq. ft.	60	----
Decks (h)	Same as occupancy served	----

1608.2.1 Creve Coeur ground snow loads. Ground snow loads to be used in determining the design snow loads for roofs shall be 20 psf.

This section added for clarification purposes.

1612.3 Establishment of flood hazard areas. To establish flood hazard areas, the applicable governing body shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled “The Flood Insurance Study for St. Louis County, Missouri and Incorporated Areas”, dated August 2, 1995, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

The proper dated engineering report was inserted as required.

1613.5.1 Acceleration parameters. The earthquake spectral response acceleration at short periods (Ss) shall be 0.54g. The earthquake spectral response acceleration at 1-second periods (S1) shall be 0.18g.

This amendment was made to be consistent with St. Louis County's adopting ordinance.

SECTION 500.200 AMENDMENTS TO CHAPTER 17 INTERNATIONAL BUILDING CODE:

– CHAPTER 17 – STRUCTURAL TESTS AND SPECIAL INSPECTIONS:

Chapter 17 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.210 AMENDMENTS TO CHAPTER 18 INTERNATIONAL BUILDING CODE:**– CHAPTER 18 – SOILS AND FOUNDATIONS:**

Chapter 18 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

1807.2.4 Guards. Guards shall be provided in accordance with Section 1013.7.

This section was added to clarify that there are circumstances when guards are required along the top of retaining walls.

Section 1809.5 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending a minimum of thirty (30) inches below the finish grade.

No changes made to methods 2 or 3 or exceptions 1, 2 or 3.

This amendment was made to establish the frost line for the City of Creve Coeur.

Section 1805.4.3 Drainage discharge.

Delete the reference to the “International Plumbing Code” and substitute the “St. Louis County Plumbing Code”.

The city's plumbing code is the St. Louis County Plumbing Code.

Section 1805.5 Enclosure of surface water run-off: Surface water run-off concentrated into an enclosed pipe system shall not be discharged closer than ten (10) feet from any property line without prior approval from the building official. If this method of discharge causes a drainage nuisance to an adjacent property, an alternate drainage method shall be proposed for approval by the building official.

Exception: This section shall not apply to enclosed pipe storm water systems of twelve (12) inches or greater in diameter that are under the jurisdiction of the City of Creve Coeur or the Metropolitan Sewer District.

This amendment was added to prevent drainage nuisances caused by downspouts, footing drains, sump pumps, etc.

SECTION 500.220 AMENDMENTS TO CHAPTER 19 INTERNATIONAL BUILDING CODE:**– CHAPTER 19 – CONCRETE:**

Chapter 19 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.230 AMENDMENTS TO CHAPTER 20 INTERNATIONAL BUILDING CODE:**– CHAPTER 20 – ALUMINUM:**

Chapter 20 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.240 AMENDMENTS TO CHAPTER 21 INTERNATIONAL BUILDING CODE:**– CHAPTER -- 21 MASONRY:**

Chapter 21 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.250 AMENDMENTS TO CHAPTER 22 INTERNATIONAL BUILDING CODE:

– CHAPTER 22 – STEEL:

Chapter 22 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.260 AMENDMENTS TO CHAPTER 23 INTERNATIONAL BUILDING CODE:

– CHAPTER 23 – WOOD:

Chapter 23 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.270 AMENDMENTS TO CHAPTER 24 INTERNATIONAL BUILDING CODE:

– CHAPTER 24 – GLASS AND GLAZING:

Chapter 24 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.280 AMENDMENTS TO CHAPTER 25 INTERNATIONAL BUILDING CODE:

– CHAPTER 25 – GYPSUM BOARD AND PLASTER:

Chapter 25 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number is hereby enacted and added thereto.

Section 2503.1 Inspection. Lath and gypsum board shall be inspected in accordance with *Section 109.3.7.*

This amendment was made so as to be consistent with the city's required sequence of inspections.

SECTION 500.290 AMENDMENTS TO CHAPTER 26 INTERNATIONAL BUILDING CODE:

– CHAPTER 26 – PLASTIC:

Chapter 26 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.300 AMENDMENTS TO CHAPTER 27 INTERNATIONAL BUILDING CODE:

– CHAPTER 27 – ELECTRICAL:

Chapter 27 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.310 AMENDMENTS TO CHAPTER 28 INTERNATIONAL BUILDING CODE:

– CHAPTER 28 – MECHANICAL SYSTEMS:

Chapter 28 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number is hereby enacted and added thereto.

Section 2801.1 Scope. Delete the references to the “International Mechanical Code” and substitute “St. Louis County Mechanical Code”.

This amendment made to identify the St. Louis County Mechanical Code as the city's mechanical code for occupancies other than individual dwelling units.

SECTION 500.320 AMENDMENTS TO CHAPTER 29 INTERNATIONAL BUILDING CODE:

– CHAPTER 29 – PLUMBING SYSTEMS:

Chapter 29 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is

hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number is hereby enacted and added thereto.

Section 2901.1 Scope. Delete the references to the “International Plumbing Code” and the “International Private Sewage Disposal Code” and substitute “St. Louis County Plumbing Code”.

This amendment made to identify the St. Louis County Plumbing Code as the city's plumbing code.

Section 2902.1 Minimum number of fixtures. Each building shall be provided with plumbing fixtures as prescribed by the St. Louis County Plumbing Code. Table 2902.1 shall apply to new buildings, additions to existing buildings and any changes of occupancy or use in an existing building which result in an increased occupant load, except new cafeterias used only by employees. Access to public toilet facilities shall not be through areas used for food preparation, repair or assembly of products for consumer use, storage rooms or mechanical equipment rooms.

Requirements for the physically disabled shall be based on this Building Code and ICC/ANSI A117.1 – 2003.

The total occupant load used to determine plumbing fixture count shall be determined by the net floor area. The use or occupancy classification shall be determined by the actual use of the various spaces within the building. The minimum number of fixtures required shall be calculated at 50 percent female and 50 percent male based on the total occupant load, except when specific occupancy information relating to gender is provided that is acceptable to the Code Official.

Once the uses and occupant loads have been determined the requirements of applicable sections of the St. Louis County Plumbing Code shall be applied to determine the minimum number of plumbing fixtures required.

State of Missouri regulations that exceed these minimums shall apply.

Exceptions:

1. For Mercantile occupancies, square feet of the net floor area shall be used to calculate the number of occupants to determine plumbing fixtures.
2. For Industrial and Warehouse occupancies, the actual number of occupants shall be used as the total occupant load to determine plumbing fixtures. For a building with a warehouse area of ten thousand (10,000) square feet or greater, a minimum of one (1) unisex toilet room including one (1) floor drain, one (1) water closet, and one (1) lavatory with hot water shall be located in the warehouse area.
3. Where outdoor seating is provided for a restaurant the actual outdoor seating area shall be included in the total occupant load for the restaurant.
4. Re-occupancy with no change in use may require a change in the number of plumbing fixtures required due to an increase in occupant load or reconfiguration of the space.

This amendment made to be consistent with the St. Louis County Plumbing Code.

TABLE 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FACILITIES. The contents of this Table as amended by the St. Louis County Plumbing Code shall apply.

This amendment made to be consistent with the St. Louis County Plumbing Code.

Section 2902.1.1 Fixture calculations. The requirements of Section 2902.1 shall apply.

Section 2902.1.2 Family or assisted use toilet and bath fixtures. The requirements of Section 413.0 of the St. Louis County Plumbing Code shall apply.

Section 2902.2 Separate facilities. The requirements of Section 412.3 and Section 413.3 of the St. Louis County Plumbing Code shall apply.

Section 2902.3 Required public toilet facilities. The requirements of Section 2902.1 of this code and Section 412.3 of the St. Louis County Plumbing Code shall apply.

Section 2902.3.1 Access. The requirements of Section 2902.1 of this code and Section 412.2 of the St. Louis County Plumbing Code shall apply.

Section 2902.3.2 Location of toilet facilities in occupancies other than covered mall buildings. The requirements of Section 412.5 of the St. Louis County Plumbing Code shall apply.

Section 2902.3.3 Location of toilet facilities in covered mall buildings. The requirements of Section 412.5 of the St. Louis County Plumbing Code shall apply.

Amendments were made to Sections 2901.1 through 2902.3.3 to be consistent with the St. Louis County Plumbing Code.

**SECTION 500.330 AMENDMENTS TO CHAPTER 30 INTERNATIONAL BUILDING CODE:
– CHAPTER 30 – ELEVATORS AND CONVEYING SYSTEMS:**

Chapter 30 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

**Section 3009
EXISTING ELEVATORS AND ESCALATORS**

Section 3009.1 Referenced standard. All existing elevators and escalators shall comply with the requirements of ASME (American Society of Mechanical Engineers) A17.3 Safety Code for Existing Elevators and Escalators listed in Chapter 35.

This new section added to be consistent with the St. Louis County's building code amending ordinance.

**SECTION 500.340 AMENDMENTS TO CHAPTER 31 INTERNATIONAL BUILDING CODE:
– CHAPTER 31 -- SPECIAL CONSTRUCTION:**

Chapter 31 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

Section 3102.1 General. Delete the reference to “180 days” and substitute “90 days”.

This amendment made to reflect the city's desire for a shorter duration for the erection of air-supported, air-inflated, or membrane-covered cable structures. This duration is consistent with the city's present code.

Section 3103.5 Membrane material. The membrane material for all tents, membrane structures and their appurtenances shall be of: approved noncombustible material as defined in Section 703.4; flame-resistant material as determined in accordance with NFPA 701 listed in Chapter 35; or material treated in an approved manner to render the material flame-resistant.

This amendment made to reinstate this section into the code. The ICC had deleted this section. St. Louis County also reinstated this section.

Section 3103.6 Certification. An affidavit or affirmation shall be submitted to the building official and a copy retained on the premises on which the tent or membrane structure is located. The affidavit shall attest to the following information relative to the flame-resistance of the fabric:

1. Names and addresses of the owners of the tent or membrane structure.
2. Date the fabric was last treated with flame-resistant solution.
3. Trade name or kind of chemical used in treatment.
4. Name of person or firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.

This amendment made to reinstate this section into the building code. The ICC had deleted this section. St. Louis County also reinstated this section.

Section 3103.7 Label. Membrane structures, tents and canopies shall bear a permanently affixed label that identifies the size and fabric or material type.

Section 3103.8 Anchorage. All temporary structures shall be anchored to the ground to resist the wind loads prescribed by Section 1609. At the discretion of the building official, the anchorage system may be required to be designed by a registered design professional.

These new sections were added to be consistent with St. Louis County's Building Code.

Section 3109.4.1.9 Pool structure as barrier. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a fixed or removable ladder or steps, the ladder or steps shall be surrounded by a barrier which meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8. A removable ladder or steps shall not constitute an acceptable alternative to enclosure requirements.

This amendment made to reflect present city building code language. St. Louis County made a similar amendment.

SECTION 3111 ANTENNAS

Section 3111.1 Permits not required. A building permit is not required for roof installation of antennal structures not more than twelve (12) feet in height. Such a structure shall be erected so as to not damage the roof covering, and when removed from the roof, the roof covering shall be repaired to maintain weather and water tightness. The installation of any antennal structure mounted on the roof of a building shall not be erected nearer to the lot line than the total height of the antennal structure above the roof, nor shall such structure be erected near electric power lines or encroach upon any street or other public space.

Section 3111.2 Permits required. Approval shall be secured for all roof-mounted antennal structures more than 12 feet in height above the roof. The application shall be accompanied by detailed drawings of the structure and methods of anchorage. All connections to the roof structure shall be properly flashed to maintain water tightness.

Section 3111.3 Dish antennas. An antenna consisting of a radiation element which transmits or receives radiation signals generated as electrical, light or sound energy, and supported by a structure with or without a reflective component to the radiating dish, usually in a circular shape with a parabolic curve design constructed of a solid or open mesh surface, shall be known as a dish antenna.

Section 3111.3.1 Permits. The approval of the building official shall be secured for all dish antenna structures more than 2 feet in diameter erected on the roof of or attached to any building or structure.

Section 3111.3.2 Structural provisions. Dish antennas larger than 2 feet in diameter shall be subject to the structural provisions of Sections 1608 and 1609. The snow load provisions of Section 1608 shall not apply where the antenna has a heater to melt falling snow.

This amendment made to reinstate Sections 3111.1 through 3111.3.2 into the building code. The ICC deleted this section. St. Louis County also reinstated this section.

SECTION 500.350 AMENDMENTS TO CHAPTER 32 INTERNATIONAL BUILDING CODE:**– CHAPTER 32 – ENCROACHMENTS INTO THE PUBLIC RIGHT-OF-WAY:**

Chapter 32 of the International Building Code, 2009 Fourth Edition, is adopted without modification.

SECTION 500.360 AMENDMENTS TO CHAPTER 33 INTERNATIONAL BUILDING CODE:**– CHAPTER 33 – SAFEGUARDS DURING CONSTRUCTION:**

Chapter 33 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

Section 3302.3 Street and adjacent property cleaning. Mud and debris on streets or adjacent properties caused either directly or indirectly by construction shall be removed immediately. This maintenance shall be performed at all times during construction. The responsibility for ensuring that streets leading to and from and properties adjacent to the construction site are kept clean shall be with the owner of said property. Failure to comply with this section shall result in the property owner being cited with a violation subject to penalties set forth in Section 114.4 or being served with a Stop Work Order specified in Section 115.0 or both.

This amendment made to satisfy the city's desire to keep streets and adjacent properties clean during construction.

Section 3303.4 Grading and restoration of lot. Where a structure has been demolished or otherwise removed from a lot and construction for the new structure has not begun, the vacant lot shall be filled, graded, and maintained in conformity to the established elevation of the street grade at curb level nearest the point of demolition or excavation. Provisions shall be made to prevent the accumulation of water or damage to any foundations on the premises or adjoining property. If construction activity as authorized by a grading permit or building permit has not commenced within thirty (30) days of the demolition of the structure, said lot shall be re-vegetated with approved vegetation.

This amendment made to prevent an unsightly or unsanitary condition to occur on a vacant lot for an extended period of time.

Section 3305.1 Facilities required. Delete the reference made to the “International Plumbing Code” and substitute “St. Louis County Plumbing Code”.

This amendment made to specify that sanitary facilities shall be provided during construction per the St. Louis County Plumbing Code.

SECTION 500.370 AMENDMENTS TO CHAPTER 34 INTERNATIONAL BUILDING CODE:**– CHAPTER 34 – EXISTING STRUCTURES:**

Chapter 34 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

Section 3401.3 Compliance with other codes. Alterations, repairs, additions and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy in the International Fire Code, International Energy Conservation Code, International Fuel Gas Code, International Property Maintenance Code, International Residential Code, St. Louis County Mechanical Code, St. Louis County Plumbing Code and NFPA 70.

This amendment made to reference the proper plumbing, mechanical and electrical codes to govern such work in existing structures.

Section 3401.4 Alternative compliance. Delete this section in its entirety.

This deletion was made to be consistent with the city's present code. By deleting this section the city will use only Chapter 34 of the 2009 IBC to regulate existing buildings and not the International Existing Building Code.

Section 3410. Conformance. Structures moved into or within the City of Creve Coeur shall comply with the provisions of this code for new structures.

Exception: The moved structure may be granted nonconforming status provided all of the following conditions are met:

1. No change shall be made in the previous use or occupancy of the moved structure.
2. No addition shall be made to the structure after it is moved.
3. It can be demonstrated to the building official, in writing, that the moved structure's structural strength, means of egress facilities, life safety systems and mechanical, electrical and plumbing systems are in compliance with the building, mechanical, electrical and plumbing codes enforced when the moved structure was originally built.

The exception was added because requiring an old building to be brought into full compliance with present codes would discourage it being moved and could result in its demolition instead of it being reused. Reusing a structure instead of demolishing it would be considered a more 'green' approach.

Section 3412.2 Applicability. Insert the date "September 14, 1953".

This amendment made to reflect the effective date of the first building code adopted by the City of Creve Coeur. Any structures existing prior to this date may comply with SECTION 3412 COMPLIANCE ALTERNATIVES, when being altered or added on to instead of complying with Chapters 2 through 33 or Section 3401.3, and 3403 through 3409.

SECTION 500.380 AMENDMENTS TO CHAPTER 35 INTERNATIONAL BUILDING CODE: – CHAPTER 35 – REFERENCED STANDARDS:

Chapter 35 of the International Building Code, 2009 Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number is hereby enacted and added thereto.

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 102.4.

ASME – American Society of Mechanical Engineers

Three Park Avenue
New York, NY 10016-5990

Standard reference number	Title	Referenced in code section number
ADD: A17.3 – 2008	Safety Code for Existing Elevators and Escalators	3009.1

ICC – International Code Council, Inc.

500 New Jersey Ave., NW
6th Floor
Washington, DC 20001

Standard reference number	Title	Referenced in code section number.
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Amended BILL No 5422

ORDINANCE No _____

DELETE: IEBC- 09 International Existing Building Code

DELETED.

DELETE: IMC – 09 International Mechanical Code

ADD: Mechanical Code- St. Louis County Mechanical Code
City Ordinance No. 5214

ADD: 102.2.1, 105.2, 107.3.3.1

DELETE: IPC – 03 International Plumbing Code

ADD: Plumbing Code – St. Louis County Plumbing Code
City Ordinance No. 5214

ADD: 101.4.3, 105.2, 107.2.7,
2902.1, 2902.1.1, 2902.1.2,
2902.2, 2902.3, 2902.3.1,
2902.3.2, 2902.3.3

NFPA – National Fire Protection Association

1 Batterymarch Park
Quincy, MA 02169-7471

Standard reference number	Title	Referenced in code section number
ADD: 70-08	National Electrical Code / St. Louis County Electrical Code – City Ordinance No. 5214	ADD: 105.2
ADD: 701.4	Standards Methods of Fire Tests for Flame-propagation of Textiles and Films	ADD: 3103.5

These amendments made to be consistent with other amendments previously made.

SECTION 2: SAVING CLAUSE: Nothing in this ordinance or in the Building Code hereby adopted, shall be construed to affect any suit or proceeding currently pending in any court as of the effective date hereof, or any rights previously acquired or liability previously incurred, or any cause or causes of action existing under any ordinance hereby repealed, as cited herein.

SECTION 3: SEVERABILITY: If any section, subsection, provision, sentence, clause, or phrase of this ordinance or of the ICC International Building Code, Fourth Edition, 2009, is, for any reasons held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this ordinance or of said code, and the City of Creve Coeur City Council hereby declares that it would have passed the same , even though such portion so held to be unconstitutional had not been included therein.

SECTION 4: EFFECTIVE DATE: This ordinance shall become effective **July 1, 2013**, in accordance with section 3.11(g) of the City Charter.

Adopted by the City Council this ___ day of _____, 2013.

ROBERT HOFFMAN
PRESIDENT OF THE CITY COUNCIL

Approved this ___ day of _____, 2013.

BARRY GLANTZ
MAYOR

ATTEST:

DEBORAH RYAN, MPCC
CITY CLERK

MEMORANDUM

TO: Mark Perkins, City Administrator

CC: Paul Langdon, Director of Community Development

FROM: Steve Unser, Chief Building Official

DATE: May 8, 2013

RE: Building Division's Draft of a City Ordinance to
Amend and Adopt the 2009 International Building Code as the
City's New Commercial Building Code.

Please find attached the aforementioned draft for review, comments and approval. St. Louis County and the majority of municipalities within St. Louis County have adopted or are in the process of adopting this building code as their new commercial building code. In the interest of code enforcement consistency throughout our region, the building division is recommending that the City of Creve Coeur do the same. This code regulates building construction for and within structures such as office buildings, churches, temples, theaters, restaurants, schools, hospitals, shopping centers and warehouses.

Please note that an explanation for each amendment is written in *italics* and underlined after each proposed amendment. These "explanations" will be removed from the body of the ordinance prior to its adoption.

On December 11, 2012, this draft of this proposed ordinance was filed with the City Clerk's office and made available for public inspection and examination pursuant to Section 67.280 RSMo. This draft was posted on the city's website for public review on December 11, 2012. Also, on December 13, 2012, printed copies of this draft were mailed to members of the city's Building Code Board of Appeals, the Associated General Contractors of St. Louis and the Creve Coeur-Olivette Chamber of Commerce. Printed copies were also made available at the building division's public counter.

See attached Exhibit A for the Building Code Board of Appeals recommendation to adopt this code as proposed.

See attached Exhibit B for Caryl Kinsey Fox's recommendation to adopt this code as proposed.

The city requested that any comments from all interested parties regarding this draft be submitted to the building division for review within ninety (90) days of the date of it being made available to the public. These review comments will be shared with the city administrator and city council for possible inclusion into a revised draft.

See attached Exhibit C for the 3/27/13 comments from the Creve Coeur-Olivette Chamber of Commerce and the 4/11/13 responses from the Building Division.

AMENDMENTS OF NOTE

There are numerous amendments proposed during a new building code adoption process. While most of these amendments are administrative or technical in nature, some merit additional attention.

Referenced page numbers are from the proposed ordinance.

Section 105.5 Expiration. (See page 3)

The maximum time frame for commencing permitted work has been kept at 180 days. The expiration date for completing new buildings and additions has been kept at 2 years from the date of issuance. The expiration date for completing tenant improvements has been reduced from 2 years to 1 year from the date of issuance. This change is intended to reduce the backlog of active building permits.

Section 109.2.1 Building Code Board of Appeals filing fee. (See page 5)
Applicant will have the filing fee refunded if the board rules in the applicant's favor.

Sections 110.3 through 110.3.12 Required inspections. (See pages 6 and 7)
More specific language was added to better communicate field inspection requirements to contractors so as to expedite the building inspection process.

Sections 113.1 through 112.9 Board of Appeals (See pages 9 and 10)
These amendments were made to 'streamline' the appeals process.

Section 903.3.1.2.2 Combustible attics. (See pages 14 and 15)
The building code as written allows combustible attics to be 'draftstopped' at prescribed locations with ½ inch gypsum wallboard which does very little to prevent the spread of fire across a combustible attic space. Please see the italicized explanation.

Section 907.2.24 Buildings equipped throughout with an automatic sprinkler system (See page 15)

This amendment has been approved per the previous three code adoption cycles (6/1995, 2/2002 and 5/2007). Please see the italicized explanation.

Section 1008.1.9.10 Stairway doors. (See page 16)

This amendment restores code language from our present code so as to be consistent with the precedent the city has already established for locking stairway doors in the city's existing multi-story buildings.

Section 1013.7 Retaining walls. (See page 17)

This amendment was made to clarify when guards are required across the top of retaining walls.

Section 3303.4 Grading and restoration of lot. (See page 26)

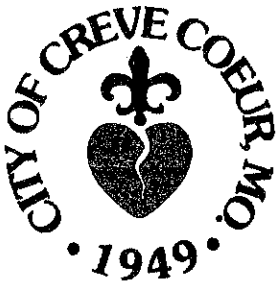
This amendment was made to prevent an unsightly or unsanitary condition from occurring on a vacant lot after demolition of the building has been completed.

Significant Building Code Changes

Every 3 years a new commercial building code is published by the International Code Council. The International Building Code is kept up to date through the review of proposed code changes submitted by code enforcement officials, industry representatives, design professionals and other interested parties. Proposed code changes are carefully considered through an open code development process in which all interested and affected parties may participate. A consensus is reached for each proposed code change by a majority vote of members at the ICC Code Change Hearings which are held twice a year (spring/fall) at various cities.

The intent of the city has been to adopt the building code as written through this model code development process and to ensure that any amendments proposed by the building division will not be less restrictive than the minimum regulations contained in the published International Building Code.

While every code change cannot be listed here, please ***see attached Exhibit D for a summary of significant changes that will be made to the city's present commercial building code (2003 IBC) by the city's adoption of the proposed commercial building code (2009 IBC).***



city
of

CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141
(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

EXHIBIT A

April 15, 2011

Mayor and Council Members
Creve Coeur Government Center
300 N. New Ballas Road.
Creve Coeur, MO 63141

RE: Building Code Board of Appeals Review of the Rough Drafts of the City
Ordinances being proposed to adopt the City's New Building Codes.

Dear Mayor and Council Members;

The Building Code Board of Appeals was asked by the Chief Building Official on December 11, 2012, to review the aforementioned ordinances that will amend and adopt the 2009 edition of the International Residential Code as our city's new building code for One- And Two-Family Dwellings, the 2009 edition of the International Building Code as our city's new commercial building code and the 2009 edition of the International Energy Conservation Code as our city's new energy conservation code.

Upon careful review of the aforementioned proposed ordinances and after our public meeting held on April 3, 2013, to further discuss these ordinances with each other and the Chief Building Official, the Building Code Board of Appeals recommends adoption of all three (3) of these proposed ordinances as written.

Thank you for your consideration of this recommendation.

Sincerely,

Building Code Board of Appeals
Bernard Colton, Chairperson

C A R Y L K I N S E Y F O X, AIA, LEED BD+C
4 6 1 P I N E B E N D D R I V E
W I L D W O O D M O 6 3 0 0 5
ckinseyfox@gmail.com
C. 310.428.1357

March 5, 2013

EXHIBIT B

Steve Unser
City of Creve Coeur
300 N. New Ballas Road
Creve Coeur, MO 63141

RE: Adoption of the 2009 I-Codes and International Energy Conservation Code

Dear Steve,

As an Architect, registered in Missouri, New York and California, I serve on the national committee of the AIA, American Institute of Architects, Codes and Standards Committee where I was the 2012 Chair. I am writing in support of Creve Coeur's adoption of the 2009 I-Codes including the International Energy Conservation Code (IECC). These are the codes that have been adopted by the City and County of St. Louis and represent the standard of construction expected by the building industry in the St. Louis Metropolitan area.

The I-Codes are the only set of building codes in the US and represent the best practices as decided by a consensus of the building industry. They are written with public safety in mind and are fully coordinated to address all building conditions. Editing or modifying specific sections of these codes could create serious conflicts or gaps in overall building safety.

For example, when the State of Missouri eliminated the requirement for fire sprinklers, they did not take into consideration that fire separations between occupants was removed from the code. The expectation was that entire buildings would be sprinkled eliminating the need for fire separations. This throws into confusion who becomes liable when fire spreads throughout a building, the builder who talked the owner out of installing the sprinklers or the designer who designed to the building code. For this reason, it is the position of the American Institute of Architects that the building codes should be adopted **without modifications**.

I am also a resident of Wildwood and attend St. Timothy's Episcopal Church at 808 N. Mason Road. Creve Coeur has a great reputation of being a conscientious community with high quality residential construction. For these reasons, I strongly support the adoption of the 2009 IECC.

The Energy Code requires minimum acceptable levels of construction including good insulation, windows and doors, as well as caulking and weatherstripping the gaps in construction. These do not add significantly to the cost of construction but do

contribute to the overall comfort of living in a home. The code also requires programable thermostats as well as efficient lighting, heating and air conditioning systems which lower operational expenses. For these reasons, I consider the IECC to be a type of consumer protection, ensuring that homeowners get a good quality home and lower energy bills for the long term.

Again, I point out that St. Louis City and County have been using the 2009 I-Codes since the end of 2011 and Missouri is one of the few states that does not have a statewide building code. Please take swift action to adopt these newer I-Codes.

Illinois and the Kansas City metro area have adopted the 2012 I-Codes including the Energy Code. Many other municipalities in our region have also adopted the 2009 IECC including, Clayton, Webster Groves, Florissant, Hazelwood, Lake St. Louis, O'Fallon, St. Charles, Troy and Wentzville.

In the end, homeowners are the biggest winners in the adoption of energy codes and for that reason, the American Institute of Architects are firmly in support of Creve Coeur Adopting the 2009 IECC.

Please feel free to contact me with any specific questions you need answered.

Caryl Kinsey Fox, AIA, LEED AP, BD&C

Subject: FW: Proposed New Building Codes (Creve Coeur - Olivette Chamber of Commerce)

EXHIBIT C

From: Unser, Steve
Sent: Thursday, April 11, 2013 5:51 PM
To: Perkins, Mark C.; 'skling@jenkinskling.com'
Cc: Katie Anderbery
Subject: RE: Proposed New Building Codes (Creve Coeur - Olivette Chamber of Commerce)

Mr. Kling;

Please see the building division's responses to your comments in red.

Please let me know if you have any questions.

Thank you.

Steve Unser, Chief Building Official
Building Division / City of Creve Coeur
300 N. New Ballas Rd, Creve Coeur, MO 63141
314.872.2513 Direct / 314.872.2505 Fax
sunser@ci.creve-coeur.mo.us / www.creve-coeur.org

From: Perkins, Mark C.
Sent: Wednesday, April 03, 2013 4:55 PM
To: 'skling@jenkinskling.com'
Cc: Unser, Steve; Katie Anderbery
Subject: RE: Proposed New Building Codes

Steve,

Thank you for your comments, our staff will provide a response. Thanks again for taking the time to review the proposed codes.

Sincerely,

Mark Perkins
City Administrator, ICMA-CM
City of Creve Coeur
300 N. New Ballas Road
Creve Coeur, MO 63141
314.872.2511
www.creve-coeur.org

From: Steve Kling [<mailto:skling@jenkinskling.com>]
Sent: Wednesday, March 27, 2013 2:12 PM
To: Perkins, Mark C.

Cc: Unser, Steve; Katie Anderbery
Subject: RE: Proposed New Building Codes

I have not received any further comments. The below comments are the ones we initially focused and the Chamber collectively thought needed some discussion, PLUS, as I mentioned at the board meeting, some clarification on the changes as to grandfathering and application issues for many of the potentially more costly changes. For example, if a landlord improves one tenant space on a floor, do the requirements kick in for that space, the whole floor or the whole building.

Building Division's Response:

When the city issues a permit for tenant improvements the building code requires that the proposed tenant improvements within the space meet present building code requirements. Examples would include seismic bracing of new ceiling grid, door hardware, travel distances to egress doors, number of egress doors required from the tenant space, emergency egress lights and exit signs, accessible reception deck, etc.

Chapter 5 - I would seek clarification from the city on Chapter 5, the Address Identification number. New and existing buildings will be provided with address numbers and letters, which must be installed on a contrasting background visible from the street. My only concern is that business owners may not want these numbers on their building if they already have an address sign, or if the letters are not of a high quality or detract from the overall look and design of a building. I would consider having the Chamber ask for sample letters to see how they will look.

Building Division's Response:

Section 501.2 Address Identification. This section was added to be consistent with the fire districts' requirements. This section regulates minimum height and width of address numerals and wants address numerals to be clearly visible to emergency response vehicles. There has always been flexibility given to building owners in terms of design, colors, etc.

Chapter 9 - I think it is important for building owners to be aware of the new rules on sprinkler systems in Chapter 9, but I cannot answer on whether there will be concerns about the required installation of sprinkler systems that is described for buildings more than 3 stories. This decision may likely be based on whether or not a significant number of Chamber members would be required to install sprinkler systems, which could be expensive.

Building Division's Response:

For clarification purposes, this requirement would only apply to new buildings more than 3 stories in height. Existing, nonsprinklered buildings more than 3 stories in height would be unaffected. This section has been in the city's building code since 1986. Most new multi-story buildings are equipped with automatic fire sprinklers because of other 'trade-offs' the building code gives for buildings that are fully sprinklered.

For Chapter 10, I think the Chamber should notify their members of the changes relating to exit signs, guards, retaining walls and dead ends in aisles. If members are forced to make these changes, it could be costly.

Building Division Response:

These requirements would apply only to new construction or new tenant improvements. The building division would be happy to meet with the Chamber to discuss any specific concerns there may be.

Chapter 29 – with the changes to the requirements to public access to toilets, this may require that some Chamber members change the route to public toilets or install new public toilets altogether. This seems like a burdensome requirement, especially if it effective when enacted.

Building Division Response:

The city contracts with St. Louis County to enforce the city's plumbing code per Ordinance No. 5214. The building division's

understanding is that the county applies these requirements to “new buildings, additions to existing buildings or changes of occupancy or use in an existing building which results in an increased occupant load.” An example of a change in use that results in an increased occupant load would be when a mercantile use is converted to a restaurant. During plan review for the types of projects noted above, the building division works with the county to proactively communicate to the owner and their architect when these requirements get ‘triggered’ by the proposed scope of work.

Stephen L. Kling, Jr., Esq.

JENKINS & KLING, P.C.
150 North Meramec Avenue
Suite 400
Clayton, Missouri 63105
(314) 721-2525
(314) 721-5525 (fax)



www.jenkinsklings.com

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From: Perkins, Mark C. [<mailto:MPerkins@ci.creve-coeur.mo.us>]
Sent: Wednesday, March 27, 2013 2:03 PM
To: Steve Kling
Cc: Unser, Steve
Subject: RE: Proposed New Building Codes

Steve,

If you have any comments regarding the proposed building codes, please forward as soon as possible as we in the process of wrapping up our review.

Thanks,

Mark Perkins
City Administrator, ICMA-CM
City of Creve Coeur
300 N. New Ballas Road
Creve Coeur, MO 63141
314.872.2511
www.creve-coeur.org

From: Perkins, Mark C.
Sent: Tuesday, February 19, 2013 10:52 AM
To: Steve Kling (skling@jenkinsklings.com)
Cc: Nancy Gray (ngray@ccochamber.com); Unser, Steve
Subject: Proposed New Building Codes

Steve,

Below is a link to our web page regarding the proposed new building codes, including summaries of the changes for each code. If you have any questions, please feel free to contact Steve Unser or myself.

<http://www.creve-coeur.org/index.aspx?NID=660>

Sincerely,

Mark Perkins
City Administrator, ICMA-CM
City of Creve Coeur
300 N. New Ballas Road
Creve Coeur, MO 63141
314.872.2511
www.creve-coeur.org

If you have received this message by mistake, please notify the City of Creve Coeur Information Systems Manager(314-442-2069)and delete this message from your system. All email to and from the City are checked for viruses. Although this e-mail and any attachment(s) are believed to be free of any virus, worm, or other digital illness or defect that might affect any computer system that receives and opens this message, it is the responsibility of the recipient to make sure that it is free from any virus or other defect. The City does not accept, and specifically disclaims, any responsibility or liability for any loss or damage arising from the receipt or use of this message, and any attachment(s) in any way.



EXHIBIT D

City of Creve Coeur Building Division

Summary of Significant Changes To the City's Present Commercial Building Code (2003 IBC) By the City's Proposed Commercial Building Code (2009 IBC)

Section 422- AMBULATORY HEALTH CARE FACILITIES.

This new section provides additional regulations for outpatient surgery centers. Although patients usually are able to walk in and walk out of these facilities the same day with a quick recovery time after surgery, there is a period of time during surgery and recovery when a potentially large number of people will need physical assistance during an emergency that would require evacuation or relocation. As such, the building code now has specific requirements for smoke barriers, automatic fire sprinkler systems, refuge areas and fire alarm systems for outpatient surgery centers.

Section 423 – STORM SHELTERS.

This new section applies to the construction of storm shelters for the purpose of providing safe refuge from storms that produce high winds such as tornadoes or hurricanes. Storm shelters may be constructed as separate detached buildings or constructed as safe rooms within buildings. Although the building code does not mandate that storm shelters be provided, it does regulate their design if they are constructed.

TABLE 508.2.5 – INCIDENTAL ACCESSORY OCCUPANCIES.

The building code no longer requires fire barriers or smoke partitions between file or storage rooms and office spaces unless the floor area of the file or storage rooms exceed 10 % of the building area of the story on which they are located.

Section 703.6 – MARKING AND IDENTIFICATION.

This new section requires that fire walls, fire barriers, smoke barriers and smoke partitions be permanently identified with signs or stenciling. Such signage shall be located above suspended ceilings or other concealed spaces so as to inform tradespeople, maintenance workers and building inspectors that any existing or new pipes, wires, conduits or ducts penetrating these fire resistance rated walls shall be properly protected with through penetration firestop

systems or fire/smoke dampers. This will help prevent heat, smoke or fire from passing through unprotected openings.

Section 903.2.1.2 GROUP A-2.

This section now requires new restaurants/night clubs with an occupant load of 100 or more persons to be equipped with an automatic fire sprinkler system. The present building code requires restaurants/night clubs with an occupant load of 300 or more persons to be equipped with an automatic fire sprinkler system. The threshold has been lowered because numerous fire deaths have occurred in unsprinklered restaurants/nightclubs that had an occupant load greater than 100 persons but less than 300 persons.

Section 903.3.1.2.2 COMBUSTIBLE ATTICS.

This new section is being proposed as a result of the 7/17/2012 Central West End Apartment fire that destroyed this 4-story apartment building. This fire started in the attic and quickly spread throughout this attic because of the “lumberyard” that was located between each line of draftstopping. If this building’s attic had been protected by fire sprinklers the result would have been repairs being made instead of demolishing and rebuilding the entire building. Missouri Baptist College has decided to sprinkler the attics of their Phase 2 dormitory buildings.

Section 1008.1.9.8 ELECTROMAGNETICALLY LOCKED EGRESS DOORS.

This new section allows the use of a locking system that provides for a greater level of security than offered by other methods addressed in the code. In specific occupancies, doors in the means of egress are now permitted to be locked with an electromagnetic lock provided they are equipped with UL listed hardware that incorporates a built-in switch that interrupts the power supply to the electromagnetic lock that unlocks these doors. This type of locking system cannot be used where panic hardware is required by other sections of the code.

Section 1008.1.10 PANIC AND FIRE EXIT HARDWARE.

This section now requires that egress doors serving restaurants, schools and similar uses with an occupant load of 50 or more persons be equipped with panic hardware. The present building code requires panic hardware on egress doors serving an occupant load of 100 or more persons in restaurants, schools and similar uses.

Section 1011.1 WHERE REQUIRED.

This section requires that additional exit signs be provided in buildings or spaces with more complicated means of egress systems. Where travel direction is not clear within an exit, it creates uncertainty and causes delays in evacuations under threatening conditions. The additional exit signs are required to expedite egress from a building during an emergency.

AN ORDINANCE ENACTING NEW ARTICLE X, ENERGY CONSERVATION CODE, OF CHAPTER 500 OF THE CITY CODE OF ORDINANCES OF THE CITY OF CREVE COEUR.

WHEREAS, the city regulates construction practices and standards by means of technical codes to protect the health, safety and welfare of its citizens, and

WHEREAS, such codes must be updated from time to time, and

WHEREAS, at least one copy of the 2009 International Energy Conservation Code, which is hereby to be adopted by reference, has been filed with the City Clerk's office and made available for public use, inspection and examination for a period of at least 90 days prior to adoption of this ordinance pursuant to Section 67.280 RSMo and notice thereof has been publicly posted, and

WHEREAS, a copy of this ordinance has been available for public inspection in the City Clerk's office and it has been read two times by the City Council as required by the City's Charter prior to adoption.

NOW, THEREFORE, be it ordained by the City Council of the City of Creve Coeur, Missouri as follows:

SECTION 1: ARTICLE X, ENERGY CONSERVATION CODE, of Chapter 500 of the City Code of Ordinances is hereby enacted to be known as "THE ENERGY CONSERVATION CODE". Said ARTICLE to read as follows:

ARTICLE X. ENERGY CONSERVATION CODE

SECTION 500.1010. ADOPTED: A certain document, one copy of which are on file in the office of the City Clerk; such copy being marked and designated as the "INTERNATIONAL ENERGY CONSERVATION CODE, 2009", FIFTH EDITION, is hereby adopted as the Energy Conservation Code of the City of Creve Coeur, Missouri, for the regulation of the design and construction of residential and commercial buildings for the effective use of energy as herein provided; and each and all of the regulations, provisions, penalties, conditions, and terms of the INTERNATIONAL ENERGY CONSERVATION CODE, 2009, FIFTH EDITION, are hereby referred to, adopted and made a part thereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes, prescribed in this Article.

SECTION 500.1020. JURISDICTIONAL TITLES: Throughout the INTERNATIONAL ENERGY CONSERVATION CODE, 2009, FIFTH EDITION, wherever the terms "name of jurisdiction" or "local jurisdiction" appear, it shall be deemed to mean "City of Creve Coeur, Missouri". Likewise, wherever the terms "department of building inspection" or "department of building safety" appear, it shall be deemed to mean "Creve Coeur Building Division". Wherever the term "code" appears, it shall mean the INTERNATIONAL ENERGY CONSERVATION CODE, 2009, FIFTH EDITION as amended in this Article.

SECTION 500.1030. AMENDMENTS TO CHAPTER 1 OF THE INTERNATIONAL ENERGY CONSERVATION CODE:

– CHAPTER 1 – Administration:

Chapter 1 of the International Energy Conservation Code, 2009, Fifth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the

following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

109.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there is and shall remain a Building Code Board of Appeals. The board shall adopt rules of procedure for conducting its business.

109.2 Limitations on authority. Any person shall have a right to appeal a decision of the building official to the Building Code Board of Appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent form of construction shall be allowed to be used. The board shall have no authority to waive requirements of this code.

109.3 Time limitation and filing procedure. All appeals shall be filed in writing with the building official. A written appeal may not be filed more than thirty days after the affected individuals are notified of the building official's decision.

109.3.1 Filing fee. An application for appeal shall not be filed without full payment of the filing fee of \$150.00. Said filing fee shall be refunded to the applicant if the Board reverses the decision of the building official.

109.4 Membership of board. The Building Code Board of Appeals shall consist of five regular members, who shall be residents of the City of Creve Coeur, appointed pursuant to Section 4.4(i) of the City Charter for three-year staggered terms. To the extent possible, based on applications submitted to the City, members of the Building Code Board of Appeals should be representative of the following professions or disciplines: registered architects, builder or superintendent of building construction with ten years of experience, structural engineer, code enforcement professional, mechanical engineer, electrical engineer, civil engineer, fire protection engineer, mechanical contractor, electrical contractor, plumbing contractor, fire protection contractor, or other disciplines associated with the building trades or design professions.

109.4.2 Chair. The Chair of the Building Code Board of Appeals shall be elected annually by the members of the Building Code Board of Appeals.

109.4.3 Secretary. The City Administrator shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the city administrator.

109.4.4 Compensation of members. Members of the Building Code Board of Appeals shall not be compensated for service but shall be reimbursed for actual expenses pursuant to established City policy.

109.4.5 Code of Ethics for members. All members shall be subject to the city's Code of Ethics.

109.5 Notice of meeting. The Building Code Board of Appeals shall meet upon notice from the chair, within 5 calendar days of the filing of a written appeal with the building official, or at stated periodic meetings.

109.6 Open hearing. All hearings before the Building Code Board of Appeals shall be open to the public. Proper public notice shall be given. The appellant, the appellant's representative, the code official, and any person whose interests are affected shall be given the opportunity to be heard.

109.6.1 Procedure. The Board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence but shall mandate that only relevant information be received.

109.7 Quorum. Three members of the Building Code Board of Appeals shall constitute a quorum for the purpose of hearing appeals.

109.9 Board decision. The Building Code Board of Appeals shall only reverse or modify the decision of the code official by a majority vote of the quorum present and voting. Otherwise, the decision shall be deemed to be upheld.

109.9.1 Notification of decision. The secretary of the board shall notify the appellant and the building official of the decision in writing.

109.9.2 Administration. The building official shall take immediate action in accordance with the decision of the board.

109.10 Court review: Any aggrieved person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision of the Building Code Board of Appeals in the office of the City Administrator.

These amendments were made to Sections 109.1 through 109.10 to reflect the city's present requirements.

SECTION 500.1040. AMENDMENTS TO CHAPTER 2 OF THE INTERNATIONAL ENERGY CONSERVATION CODE:

– CHAPTER 2 – Definitions:

Chapter 2 of the International Energy Conservation Code, 2009, Fifth Edition, is adopted without modification.

SECTION 500.1050 AMENDMENTS TO CHAPTER 3 OF THE INTERNATIONAL ENERGY CONSERVATION CODE:

– CHAPTER 3 – GENERAL REQUIREMENTS:

Chapter 3 of the International Energy Conservation Code, 2009, Fifth Edition, is adopted without modification.

SECTION 500.1060 AMENDMENTS TO CHAPTER 4 OF THE INTERNATIONAL ENERGY CONSERVATION CODE:

– CHAPTER 4 – RESIDENTIAL ENERGY EFFICIENCY:

Chapter 4 of the International Energy Conservation Code, 2009, Fifth Edition, is adopted without modification.

SECTION 500.1070 AMENDMENTS TO CHAPTER 5 OF THE INTERNATIONAL ENERGY CONSERVATION CODE:

– CHAPTER 5 – COMMERCIAL ENERGY EFFICIENCY:

Chapter 5 of the International Energy Conservation Code, 2009, Fifth Edition, is adopted without modification.

SECTION 500.1080 AMENDMENTS TO CHAPTER 6 OF THE INTERNATIONAL ENERGY CONSERVATION CODE:

– CHAPTER 6 – REFERENCED STANDARDS:

Chapter 6 of the International Energy Conservation Code, 2009, Fifth Edition, is adopted without modification.

SECTION 2: SAVING CLAUSE: Nothing in this ordinance or in the Energy Conservation Code hereby adopted, shall be construed to affect any suit or proceeding currently pending in any court as of the effective date hereof, or any rights previously acquired or liability previously incurred, or any cause or causes of action existing under any ordinance hereby repealed, as cited herein.

SECTION 3: SEVERABILITY: If any section, subsection, provision, sentence, clause, or phrase of this ordinance or of the ICC International Energy Conservation Code, Fifth Edition, 2009, is, for any reasons held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this ordinance or of said code, and the City of Creve Coeur City Council hereby declares that it would have passed the same, even though such portion so held to be unconstitutional had not been included therein.

SECTION 4: EFFECTIVE DATE: This ordinance shall become effective **July 1, 2013**, pursuant to section 3.11(g) of the City Charter.

Adopted by the City Council this ___ day of _____, 2013.

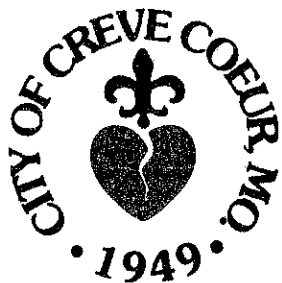
ROBERT HOFFMAN
PRESIDENT OF THE CITY COUNCIL

Approved this ___ day of _____, 2013.

BARRY GLANTZ
MAYOR

ATTEST:

DEBORAH RYAN, MPCC
CITY CLERK



city
of

CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141
(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

EXHIBIT A

April 15, 2011

Mayor and Council Members
Creve Coeur Government Center
300 N. New Ballas Road.
Creve Coeur, MO 63141

RE: Building Code Board of Appeals Review of the Rough Drafts of the City
Ordinances being proposed to adopt the City's New Building Codes.

Dear Mayor and Council Members;

The Building Code Board of Appeals was asked by the Chief Building Official on December 11, 2012, to review the aforementioned ordinances that will amend and adopt the 2009 edition of the International Residential Code as our city's new building code for One- And Two-Family Dwellings, the 2009 edition of the International Building Code as our city's new commercial building code and the 2009 edition of the International Energy Conservation Code as our city's new energy conservation code.

Upon careful review of the aforementioned proposed ordinances and after our public meeting held on April 3, 2013, to further discuss these ordinances with each other and the Chief Building Official, the Building Code Board of Appeals recommends adoption of all three (3) of these proposed ordinances as written.

Thank you for your consideration of this recommendation.

Sincerely,

Building Code Board of Appeals
Bernard Colton, Chairperson

C A R Y L K I N S E Y F O X, A I A, L E E D B D + C c k i n s e y f o x @ g m a i l . c o m
4 6 1 P I N E B E N D D R I V E
W I L D W O O D M O 6 3 0 0 5 C . 3 1 0 . 4 2 8 . 1 3 5 7

March 5, 2013

EXHIBIT B

Steve Unser
City of Creve Coeur
300 N. New Ballas Road
Creve Coeur, MO 63141

RE: Adoption of the 2009 I-Codes and International Energy Conservation Code

Dear Steve,

As an Architect, registered in Missouri, New York and California, I serve on the national committee of the AIA, American Institute of Architects, Codes and Standards Committee where I was the 2012 Chair. I am writing in support of Creve Coeur's adoption of the 2009 I-Codes including the International Energy Conservation Code (IECC). These are the codes that have been adopted by the City and County of St. Louis and represent the standard of construction expected by the building industry in the St. Louis Metropolitan area.

The I-Codes are the only set of building codes in the US and represent the best practices as decided by a consensus of the building industry. They are written with public safety in mind and are fully coordinated to address all building conditions. Editing or modifying specific sections of these codes could create serious conflicts or gaps in overall building safety.

For example, when the State of Missouri eliminated the requirement for fire sprinklers, they did not take into consideration that fire separations between occupants was removed from the code. The expectation was that entire buildings would be sprinkled eliminating the need for fire separations. This throws into confusion who becomes liable when fire spreads throughout a building, the builder who talked the owner out of installing the sprinklers or the designer who designed to the building code. For this reason, it is the position of the American Institute of Architects that the building codes should be adopted **without modifications**.

I am also a resident of Wildwood and attend St. Timothy's Episcopal Church at 808 N. Mason Road. Creve Coeur has a great reputation of being a conscientious community with high quality residential construction. For these reasons, I strongly support the adoption of the 2009 IECC.

The Energy Code requires minimum acceptable levels of construction including good insulation, windows and doors, as well as caulking and weatherstripping the gaps in construction. These do not add significantly to the cost of construction but do

contribute to the overall comfort of living in a home. The code also requires programable thermostats as well as efficient lighting, heating and air conditioning systems which lower operational expenses. For these reasons, I consider the IECC to be a type of consumer protection, ensuring that homeowners get a good quality home and lower energy bills for the long term.

Again, I point out that St. Louis City and County have been using the 2009 I-Codes since the end of 2011 and Missouri is one of the few states that does not have a statewide building code. Please take swift action to adopt these newer I-Codes.

Illinois and the Kansas City metro area have adopted the 2012 I-Codes including the Energy Code. Many other municipalities in our region have also adopted the 2009 IECC including, Clayton, Webster Groves, Florissant, Hazelwood, Lake St. Louis, O'Fallon, St. Charles, Troy and Wentzville.

In the end, homeowners are the biggest winners in the adoption of energy codes and for that reason, the American Institute of Architects are firmly in support of Creve Coeur Adopting the 2009 IECC.

Please feel free to contact me with any specific questions you need answered.

Caryl Kinsey Fox, AIA, LEED AP, BD&C

EXHIBIT C

February 20, 2013

Honorable Mayor and City Council
300 N New Ballas Rd
Creve Coeur, MO 63141

Re. International Energy Conservation Code

Dear Mayor and Members of the City Council:

On February 20, 2013, the Climate Action Task Force met and discussed the proposed International Energy Conservation Code. The Task Force voted with a unanimous recommendation to the City Council that the IECC be adopted as proposed by City staff. The Task Force has met multiple times to discuss the IECC and advises that its adoption will mark a key step toward enhancing the energy efficiency of new construction in the city and reducing the city's greenhouse gas emissions.

Sincerely,

A handwritten signature in black ink, appearing to read "Sue Baseley", with a stylized flourish at the end.

Sue Baseley
Climate Action Task Force Vice Chair

City of Creve Coeur / Building Division **EXHIBIT D**
COMPARISON TABLE
BETWEEN
PRESENT ENERGY CONSERVATION CODE REQUIREMENTS
AND
2009 INTERNATIONAL ENERGY CONSERVATION CODE REQUIREMENTS.

NOTE: The Building Division will recommend that the 2009 International Energy Conservation Code and Chapter 11 – Energy Efficiency- of the 2009 International Residential Code be adopted as written.

Building Element	Current Requirement	2009 IRC, Chapter 11 Or 2009 IECC, Chapter 4	What St. Louis County Did
Roof R Value	30	38	30
Wall R Value	13	13	13
Floor R Value	19	19	19
Crawl Space R Value	5	10	5
Exposed Duct R Value	5	8	4
Fenestration U- Factor	0.40	0.35	0.40
Programmable Thermostats	Not Required	Required	Required
High Efficiency Light Bulbs	Not Required	Required for 50% of permanent light fixtures	Required for 50% of permanent light fixtures
Thermal Envelope Sealing/Testing	Not Required	Required	Amended 'sealing' Deleted 'testing'
Permanent Energy Conservation Certificate Posted	Not Required	Required	Deleted
Duct Sealing / Testing	Sealing Required	Sealing and Testing Required	Sealing Required. Testing Deleted.
Wood-Burning Fireplaces	Can be open to a room.	Must have gasketed doors and outside air	Deleted
Thermal Cover for Heated Swimming Pools	Not Required	Required	Required
Insulating & Weatherstripping Attic Access Panels	Not Required	Required	Insulating Required Weatherstripping Deleted

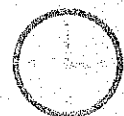
TRUE COST OF THE

2009 INTERNATIONAL ENERGY CONSERVATION CODE

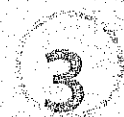


FOR NEW HOMES IN
MISSOURI
CLIMATE ZONE 4

Homes are the biggest investment we make—and everyone deserves a home that meets national minimum energy efficiency standards. While it's true that homeowners can always improve the efficiency of their homes, it is far more cost-effective to upgrade building components during construction, putting in better windows or swapping out one grade of insulation for a better one. Here's what buyers get with the 2009 IECC:



Payback Period
14 months



3-year Profit
\$476.75

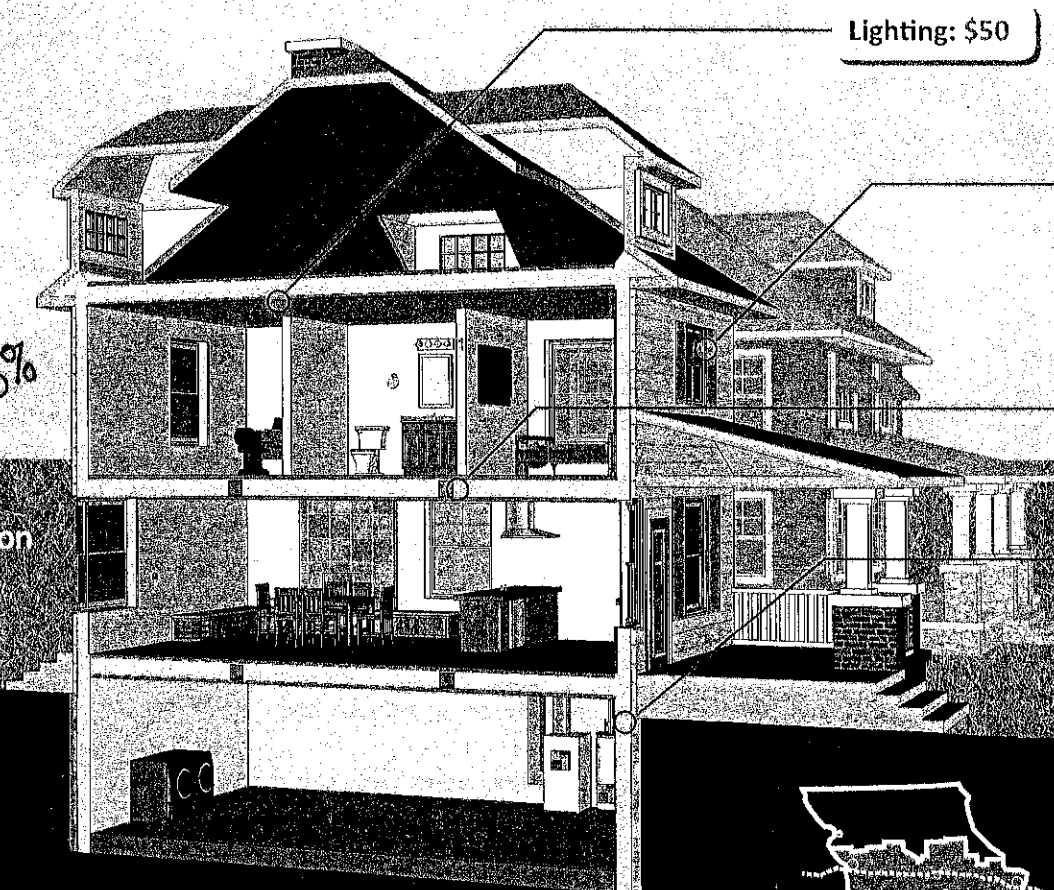
18%



Annual Energy Reduction
18%



5-year Profit
\$992.69



Lighting: \$50

Window Upgrades
CLIMATE ZONE 4: \$735

Duct Sealing and
Testing: \$350

Insulation Upgrades
CLIMATE ZONE 4: \$383



Climate Zone 4 □□□□□□
u-factor: .5 → .35 WINDOW
r-value: 30 → 38 INSULATION
CEILING



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES



For the full Incremental Cost Analysis study, please visit bcap-ocean.org

TRUE COST OF THE



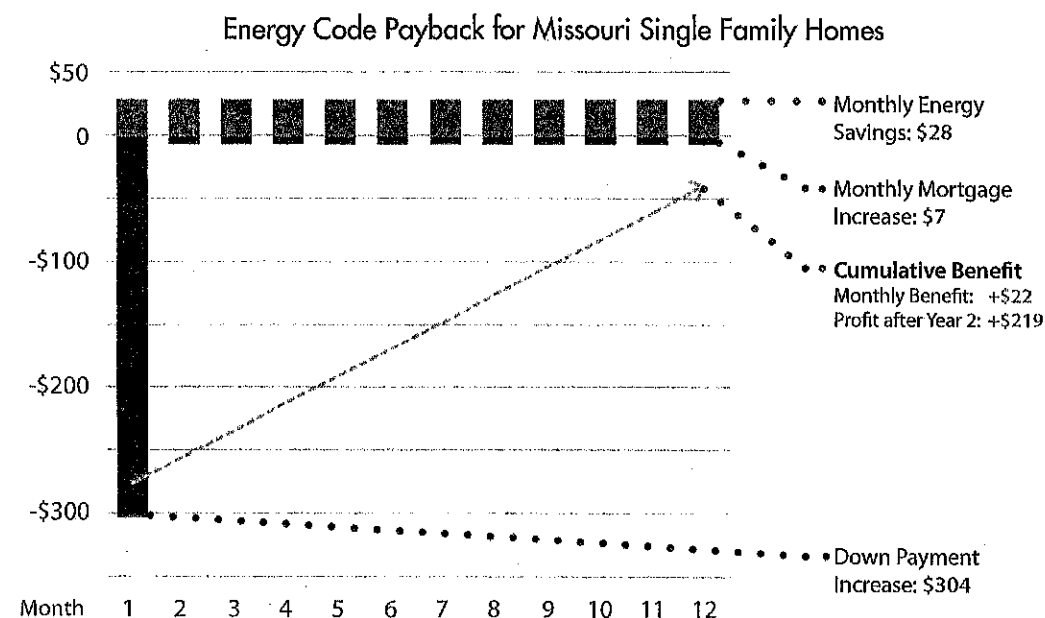
FOR NEW HOMES IN
MISSOURI
CLIMATE ZONE 4

2009 INTERNATIONAL ENERGY CONSERVATION CODE

One of the major barriers to energy code adoption across the country is the concern that new codes will add to the purchase price and potential buyers will not be able to afford the homes they want. In Missouri, upgrading homes to the 2009 International Energy Conservation Code will actually reduce out-of-pocket expenses for homeowners – paying off their initial investment in a matter of months.

For the average new home built in IECC climate zone 4*, BCAP estimates the costs of the new code will add no more than a total of \$1,519 in construction costs—an increase of only 0.6%. When this amount is rolled into the average mortgage, real costs to homebuyers will mean a down payment increase of \$303.72 and \$6.56 extra on monthly mortgage bills.

These added mortgage costs will be offset, however, by monthly energy savings of \$28.06, helping homebuyers pay off their initial investment in only fourteen months. After breaking even in month fourteen, the home will return buyers a profit of \$22 per month—for a total return of \$258 every year. This return on investment is graphed below and presented as a balance sheet at right.



Month	Mortgage Increase	Monthly Energy Savings	Cumulative Cost/Benefit
1	\$303.72	\$28.06	-\$275.66
2	\$6.56	\$28.06	-\$254.17
3	\$6.56	\$28.06	-\$232.67
4	\$6.56	\$28.06	-\$211.17
5	\$6.56	\$28.06	-\$189.67
6	\$6.56	\$28.06	-\$168.18
7	\$6.56	\$28.06	-\$146.68
8	\$6.56	\$28.06	-\$125.18
9	\$6.56	\$28.06	-\$103.68
10	\$6.56	\$28.06	-\$82.19
11	\$6.56	\$28.06	-\$60.69
12	\$6.56	\$28.06	-\$39.19
13	\$6.56	\$28.06	-\$17.69
14	\$6.56	\$28.06	\$3.81
15	\$6.56	\$28.06	\$25.30
16	\$6.56	\$28.06	\$46.80
17	\$6.56	\$28.06	\$68.30
18	\$6.56	\$28.06	\$89.80

Break Even
\$22 profit
every month
↓

This model assumes an average sale price of \$267,451 for a 2,400 square foot home. The mortgage is conservatively set at 30 years, with 20% down and the current average nationwide interest rate of 5.05%. With a lower down payment—such as 10% down—consumers will break even on their investment even sooner.

* Missouri's climate zone 4 covers the lower three-fourths of the state, and represents 93% of the state's population

MEMORANDUM

TO: Mark Perkins, City Administrator

CC: Paul Langdon, Director of Community Development

FROM: Steve Unser, Chief Building Official

DATE: May 8, 2013

**RE: Building Division's Draft of a City Ordinance to
Amend and Adopt the 2009 International Energy Conservation
Code as the City's New Energy Conservation Code.**

Please find attached the aforementioned draft for review and comments. Many municipalities within St. Louis County have adopted or are in the process of adopting this energy conservation code as their new energy conservation code. In the interest of code enforcement consistency throughout our region, the building division is recommending that the City of Creve Coeur do the same. This code regulates the design and construction of residential and commercial buildings for the effective use of energy.

The only amendments proposed to this code are in Chapter 1- ADMINISTRATION- Section 109- BOARD OF APPEALS. The reason these amendments are proposed is to make them consistent with the Board of Appeals process outlined in the city's commercial and residential building codes.

On December 11, 2012, this draft of this proposed ordinance was filed with the City Clerk's office and made available for public inspection and examination pursuant to Section 67.280 RSMo. This draft was posted on the city's website for public review on December 11, 2012. Also on December 13, 2012, printed copies of this draft were mailed to members of the city's Building Code Board of Appeals, the Associated General Contractors of St. Louis and the Creve Coeur-Olivette Chamber of Commerce. Printed copies were also made available at the building division's public counter.

See attached Exhibit A for the Building Code Board of Appeals recommendation to adopt this code as proposed.

See attached Exhibit B for Caryl Kinsey Fox's recommendation to adopt this code as proposed.

See attached Exhibit C for the Climate Action Task Force's recommendation to adopt this code as proposed.

The city requested that any comments from all interested parties regarding this draft be submitted to the building division for review within ninety (90) days of the date of it being made public. There were no public comments submitted to the building division regarding this code.

Significant Energy Code Changes

Every 3 years a new energy conservation code is published by the International Code Council. The International Energy Conservation Code is kept up to date through the review of proposed code changes submitted by code enforcement officials, industry representatives, design professionals and other interested parties. Proposed code changes are carefully considered through an open code development process in which all interested and affected parties may participate. A consensus is reached for each proposed code change by a majority vote of members at the ICC Code Change Hearings which are held twice a year (spring/fall) at various cities.

The intent of the city has been to adopt the energy conservation code as written through this model code development process and to ensure that any amendments proposed by the building division will not be less restrictive than the minimum regulations contained in the published International Energy Conservation Code.

While every code change cannot be listed here, please ***see attached Exhibit D for a summary of significant changes that will be made to the city's present energy conservation code (2003 IECC) by the city's adoption of the proposed energy conservation code (2009 IECC).***

Please see attached Exhibit E for the 'true cost' of the 2009 International Energy Conservation Code. These increased construction costs (\$1,519) are based on a 2,400 square foot home. This works out to an increased cost of \$0.63 per square foot. Another increased cost not included in this exhibit is approximately \$300 for the Blower Door Test required to test the air tightness of the building envelope. This would increase the average increased construction cost of a new home to \$1,819 or \$0.75 per square foot. The average size of a new home in Creve Coeur is approximately 3,000 – 4,000 square feet. This works out to be an increased cost of \$2,250 - \$3,000 for a new Creve Coeur home to be built in compliance with the 2009 IECC. This same exhibit points out that the monthly energy savings realized by complying with the 2009 IECC would be \$28.06 for a

2,400 square foot new home. The monthly energy savings for a new home that is 3,000 – 4,000 square feet in size would be approximately \$33- \$44.

Stronger energy – efficient construction helps to reduce pollution by reducing energy consumption.

AN ORDINANCE REPEALING ARTICLE VI, RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, OF CHAPTER 500 OF THE CITY CODE OF ORDINANCES OF THE CITY OF CREVE COEUR, AND ENACTING IN LIEU THEREOF A NEW ARTICLE VI, RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS.

WHEREAS, the city regulates construction practices and standards by means of technical codes to protect the health, safety and welfare of its citizens, and

WHEREAS, such codes must be updated from time to time, and

WHEREAS, at least one copy of the 2009 International Residential Code for One- and Two-Family Dwellings, which is hereby to be adopted by reference, has been filed with the City Clerk's office and made available for public use, inspection and examination for a period of at least 90 days prior to adoption of this ordinance pursuant to Section 67.280 RSMo and notice thereof has been publicly posted, and

WHEREAS, a copy of this ordinance has been available for public inspection in the City Clerk's office and it has been read two times by the City Council as required by the City's Charter prior to adoption.

NOW, THEREFORE, be it ordained by the City Council of the City of Creve Coeur, Missouri as follows:

SECTION 1: ARTICLE VI, RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, of Chapter 500 of the City Code of Ordinances is hereby repealed and a new ARTICLE VI of Chapter 500 is hereby enacted to be known as "THE RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS". Said ARTICLE to read as follows:

ARTICLE VI. RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS

SECTION 500.420 ADOPTED: A certain document, one copy of which is on file in the office of the City Clerk, such copy being marked and designated as the "INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2009", FOURTH EDITION, including "APPENDIX A (IFGC) – SIZING AND CAPACITIES OF GAS PIPING"; "APPENDIX B (IFGC) – SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES, AND APPLIANCES LISTED FOR USE AND TYPE B VENTS"; APPENDIX C (IFGC) – EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS"; "APPENDIX G – SWIMMING POOLS, SPAS AND HOT TUBS"; AND "APPENDIX K – SOUND TRANSMISSION", as published by the International Code Council, Inc., is hereby adopted as the Residential Code of the City of Creve Coeur, Missouri, for regulating and governing the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures as herein provided; and each and all of the regulations, provisions, penalties, conditions, and terms of the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2009, FOURTH EDITION, are hereby referred to, adopted and made a part hereof, as if fully set out in this Article, with the additions, insertions, deletions, and changes, prescribed in this Article.

SECTION 500.430 JURISDICTIONAL TITLES: Throughout the INTERNATIONAL RESIDENTIAL CODE ONE- AND TWO-FAMILY DWELLINGS, 2009, FOURTH EDITION, wherever the terms “name of jurisdiction” or “local jurisdiction” appear, it shall be deemed to mean “City of Creve Coeur, Missouri”. Likewise, wherever the terms “department of building inspection” or “department of building safety” appear, it shall be deemed to mean “Creve Coeur Building Division”. Wherever the term “code” appears, it shall mean the INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS, 2009, FOURTH EDITION as hereby amended.

SECTION 500.440 ADDITIONS, INSERTIONS AND CHANGES: The following subsections are hereby revised as follows:

Section R101.1 Insert: “City of Creve Coeur”.

SECTION 500.450 AMENDMENTS TO CHAPTER 1 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 1 – ADMINISTRATION:

Chapter 1 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth herein. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R101.2 Scope. Add the following: Notwithstanding the provisions of this code, the maximum number of stories for any structure shall be as provided in the City Zoning Code.

Exception: Deleted in its entirety.

This change was made to be consistent with the city zoning code. The IRC, as written, would allow one- and two-family dwellings to be three stories in height. The city zoning code limits these type structures to 2 stories in height. The exception was deleted because the “live/work” concept would allow up to 50 percent of the area of a one or two family dwelling or townhome to be used for business purposes and would allow up to 5 “nonresidential employees” to work there. The city’s zoning code allows only 10 percent of a home to be used as a home occupation and only the home’s owner and family members who live in the home can be employees.

R102.8 Matters not provided for. Any requirements that are essential for the structural, fire or sanitary safety of an existing or proposed building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code, shall be determined by the building official.

This amendment made to add a new section to this code so as to be consistent with the city’s present building code.

R104.6.1 Interference with building official: No person shall hinder, obstruct, resist, fail to provide entry at reasonable times, or otherwise interfere with the code official in the performance of his official duties.

This amendment made to add a new section to this code so as to be consistent with the city’s present building code.

R104.6.1.1 Disasters. In the event of a disaster such as a windstorm, tornado, flood, fire, earthquake, bomb blast or explosion, the building official is authorized to deputize Missouri Structural Assessment

and Visual Evaluation (SAVE) Volunteer Inspectors certified by the Missouri State Emergency Management Agency (SEMA) to conduct emergency post-disaster safety evaluations of buildings.

This amendment made to add a new section to this code that allows the building official to expand the city's inspection capabilities after a disaster. This is consistent with St. Louis County's building code adopting ordinance.

R104.12 Rule-making authority. The building official shall have authority, as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this code, to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules shall not have the effect of waiving structural or fire performance requirements specifically provided for in this code or of violating accepted engineering practice involving public safety.

This amendment made to add a new section to this code so as to be consistent with the city's present building code.

R105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. Retaining walls which are not over 2 feet (610mm) in height measured from the top of the proposed finished grade at the non-retained side of the wall to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.
2. Painting, tiling, carpeting and similar finish work.
3. Prefabricated swimming pools accessory to a Group R-3 occupancy which have a maximum water depth of 24 inches (610mm), a maximum water volume of 5,000 gallons (18925L) and are installed entirely above ground.

Electrical:

Any work exempted from permits by the Electrical Code.

Gas:

Any work exempted from permits by the Mechanical Code.

Mechanical:

Any work exempted from permits by the Mechanical Code.

Plumbing:

Any work exempted from permits by the Plumbing Code.

This amendment made to clarify when permits are not required.

R105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 90 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 90 days after the time the work is commenced, or after one year from the date of issuance if the permit has not otherwise expired. The building official is authorized to grant, in writing, one or more extensions of time, for periods not to exceed 30 days each. An extension shall be requested in writing and justifiable cause must be demonstrated.

This amendment made to reflect the city's present requirements.

R105.5.1 Expiration of demolition permits. Demolition work shall be completed within thirty (30) days after the date of issuance of the demolition permit. The building official may, after receiving a written request from the applicant, grant one or more thirty day extensions to this permit if the applicant presents evidence of justifiable cause.

This amendment made to reflect the city's present requirements.

R105.9 Placement of permit and inspection placard. The building permit or copy shall be kept on the site of the work until the completion of the project. An inspection placard shall be posted on the job site in accordance with Section R109.1.1 of this code.

R105.10 Compliance with permit. All work shall conform to the approved application and the approved construction documents for which the permit has been issued and any approved amendments to the approved application or the approved construction documents.

R105.11 Compliance with codes and ordinances. Neither the granting of a permit, nor the approval of the construction documents, nor inspections made by the building official, or his authorized representative, during the erection of the building, structure, or any alteration or addition thereto, shall in any way relieve the owner or tenant of such building, structure, or property from complying with the requirements of this code, the Creve Coeur Zoning Code or any other governing law or ordinance.

These amendments were made to add new sections 105.9 and 105.11 so as to be consistent with the city's present building code.

R106.1 Construction documents. The application for a permit shall be accompanied by three (3) complete sets of construction documents drawn to scale. The construction documents and site plans shall be prepared and sealed by an architect or an engineer licensed and registered in the State of Missouri to render this service. All construction documents and site plans shall be prepared by the appropriate registered design professional consistent with the professional registration laws of the State of Missouri. All construction documents submitted with an application for a building permit shall bear an original embossed or wet ink seal and an original dated signature of the responsible Missouri registered design professional for each discipline on the front sheet of each discipline within each set of construction documents. In addition, all other sheets of the construction documents, other than the specifications or calculations, shall bear the original embossed or wet ink seal and the original dated signature or the mechanically reproduced seal and dated signature of the responsible Missouri registered design professional. Any addenda or modifications submitted for changes to the construction documents shall also bear the original seal and original dated signature of the responsible Missouri registered design professional. Such changes shall be clearly indicated. The building official may waive these requirements when the scope of the work is of a minor nature and does not involve structural alterations.

This amendment made to reflect the city's present requirements.

R106.1.1.1 Residential Fire Sprinkler Option Form. An application for permit for a one or two family dwelling or residence or townhouse shall be accompanied by the city's Residential Fire Sprinkler Option Form signed by the builder and the purchaser affirming that a fire sprinkler system was offered to the purchaser prior to entering into the purchase contract in conformance with Sections R313.1 and R313.2 of this code. If there is no purchaser at the time of the permit application submittal, then said signed Form shall be submitted as soon as there is a purchaser and prior to the issuance of a certificate of occupancy for the new residence. The provisions of this section shall expire on December 31, 2019.

This amendment made to be consistent with state law.

R106.2.1 All buildings and structures. For all buildings and structures to be constructed, the following additional information shall be shown on the site plan:

- A. The location of all front, side and rear building lines, together with all easements including utilities, drainage and roadways.
- B. The present and proposed finished grades of yards, driveways or walks for drainage in relation to the established first floor elevation including the slope away from the foundation.
- C. The lot number, block (if any), plat or subdivision number, recorded subdivision name, front street and side streets (where applicable) and the north direction arrow.

R106.2.1.1 Private sewage disposal system. The site plan shall indicate the location of a private sewage system when a public sewage system is not available. All technical data and soil data required by the Plumbing Code shall be submitted with the site plan.

R108.2 Schedule of fees. The fees for plan examinations, issuing permits, making inspections, working overtime, issuing certificates of occupancy, establishing escrow funds and other administrative enforcement activities performed by the building department shall be paid in accordance with the fees established in Appendix A, Community Development and Public Works Fee Schedule, of the City Code of Ordinances.

R108.2.1 Building Code Board of Appeals filing fee. A filing fee of \$150.00 shall be paid upon the submittal of the written appeal in order for a quorum of the Building Code Board of Appeals to be notified to convene for the purpose of hearing an appeal of a decision of the building official as set forth in Section R112. The filing fee shall be refunded to the applicant if the Board reverses the decision of the building official.

These amendments were made to Sections R106.2.1 through R108.2.1 to reflect the city's present requirements.

R108.3 Building permit valuations. The applicant for a permit shall provide an estimated construction cost for the project at the time of application. The estimated construction cost shall be for the total value of work, including materials, labor, profit and overhead for all structural, architectural, mechanical, electrical and plumbing work, as it relates to the project for which the permit is to be issued. The estimated construction cost shall not include the cost of land or registered design professional fees. If, in the opinion of the building official, the estimated construction cost is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. Final building permit valuation shall be set by the building official.

R108.5 Work commencing before permit issuance. Where any work for which a permit is required by this code is started, or proceeded with, prior to obtaining said permit, the normal applicable fee shall be doubled and a penalty fee of up to \$500.00 may be charged by the building official. The payment of said doubled fee or penalty shall not relieve any persons from fully complying with the requirements of this code or from other penalties prescribed herein.

R108.6 Refunds. In the case of revocation of a permit no refund shall be granted. Any excess fee for a project that has not been commenced shall be returned to the permit holder upon written request received no later than twelve (12) months after the date the permit was issued and the permit shall be cancelled. All plan examination fees, permit processing fees, inspection fees and penalties that have been imposed upon the permit holder under the requirements of this code shall be deducted from the refund or paid by the permit holder prior to any refund being granted.

These amendments were made to Sections 108.3 through 108.6 to reflect the city's present requirements.

R109.1.1 Inspection Placard. Work requiring a permit shall not commence until the permittee or his/her agent posts an inspection placard at the job site for recording inspections. Failure to maintain this inspection placard will not relieve the permittee of responsibility as provided by this code. When work has progressed to a point of having windows, or when the job is an alteration or addition, the placard shall be attached to the available glass in view for recording the balance of inspections required by the code. Absence of the inspection placard shall result in the imposition of a penalty fee as set forth in Section R108.2.

R109.2 Preliminary inspection. Before issuing a permit, the building official is authorized to examine or caused to be examined buildings, structures and sites for which an application has been filed.

R109.3 Required inspections. After issuing a building permit, the building official shall conduct inspections as set forth in Sections R109.3.1 through R109.3.11 during and upon completion of the work for which a permit has been issued so as to be able to ensure that substantial compliance with this code and the city-approved construction documents has occurred. A record of all such inspections and any violations of this code shall be maintained by the building official.

R109.3.1 Soil and footing inspection. A soil inspection shall be made after excavation for the building or structure is complete and trenches for footings, spread footings, column pads, grade beams, and other types of footings are crumbed, formed, have the reinforcing steel tied in place, and are ready for concrete. A City-approved barrier shall be in place around the excavation until backfilling has occurred. No concrete shall be placed without this inspection.

R109.3.1.1 Lowest floor elevation. Any building or structure permitted to be constructed on property designated as a flood hazard area shall have an elevation certification (as required by Section R322.1.910 and prepared and sealed by a registered design professional) which certifies the lowest floor elevation, including the basement, submitted to the building official prior to the required foundation inspection. No foundation inspection shall be approved until said submittal is made.

R109.3.2 Foundation inspection. A foundation inspection shall be made after the top of the footing has been cleaned, the foundation forms have been properly set, the reinforcing steel has been cleaned and tied in place, and the proper anchor bolts are on site. A City-approved barrier shall be in place around the excavation until backfilling has occurred. No concrete shall be placed without this inspection.

R109.3.3 Pier inspection. A pier inspection shall be made where special foundations such as drilled and poured-in-place concrete piers, caissons, driven piles of all types, and other extraordinary types of foundations are required. Additional pier inspections shall be made when the code official determines the size of the project warrants it. Reinforcing steel required in the above cases shall be placed to allow for adequate inspections. A City-approved barrier shall be placed around the excavation until backfilling has occurred. No concrete shall be placed without this inspection.

R109.3.4 Structural concrete slab and under-floor inspection. Structural concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the sub-floor.

R109.3.5 Exterior wall sheathing inspection. An exterior wall sheathing inspection shall be made prior to the building wrap being installed over the braced wall panels or portal frames.

R109.3.6 Mechanical rough-in inspection. A mechanical rough-in inspection shall be made after all supply air ducts, return air ducts / plenums and appliance vents have been installed.

R109.3.7 Framing inspection. A framing inspection shall be made after the plumbing, mechanical and electrical rough-in inspections have been made and approved by those inspection departments and their dated approval signatures have been noted on the posted inspection placard; and after all masonry walls, fireplace chimneys, vents, and all framing (including the floor, wall, and roof structures, fireblocking, bracing and sheathing) are completed. Protection of joints and penetrations in fire-resistance rated assemblies shall not be concealed from view until inspected and approved. No mechanical, electrical, plumbing, or framing systems shall be concealed before this inspection is made and approved by the code official.

R109.3.8 Ceiling cover inspection. A ceiling cover inspection shall be made after the plumbing, mechanical and electrical rough-in inspections have been made and approved by those inspection departments and their dated approval signatures have been noted on the posted inspection placard; and after all masonry walls, fireplace chimneys, vents, ceiling grid and hanger wires, and all framing (including the floor and/or roof structures, fireblocking, bracing and sheathing) are completed. Protection of joints and penetrations in fire-resistance rated assemblies shall not be concealed from view until inspected and approved.

R109.3.9 Energy efficiency inspections. Inspections shall be made to determine compliance with Chapter 11 of this Code and shall include, but not be limited to, inspections for envelope insulation R and U values, fenestration U value, duct system R value, duct sealing, building envelope air tightness and HVAC and water heating equipment efficiency.

R109.3.10 Gypsum board and plaster. The following ceiling and wall gypsum board or plaster inspections shall be performed as specified:

- A) A lath inspection shall be made after all lathing, interior and exterior, is in place and before any plaster is applied.
- B) A gypsum board inspection shall be made after all gypsum board sheets are in place and properly fastened and before any joint compound is applied over joints and fasteners.

Each layer of a multi-layered fire-resistance rated assembly shall be inspected and approved prior to the next layer being applied. Protection of joints and penetrations in fire-resistance rated assemblies shall not be concealed from view until inspected and approved.

R109.3.11 Rough grading inspection. A rough grading inspection shall be made after the site has been graded to the elevations and contours shown on the city-approved plans. No ground cover shall be planted or placed until this inspection has been approved.

R109.3.12 Final grading inspection. A final grading inspection shall be made after ground cover has been established and erosion of soil will no longer occur from the site.

R109.3.13 Supplemental inspections. In addition to the inspections specified above, the building official is authorized to make or require other inspections or re-inspections of any construction work to ascertain compliance with the provisions of this code, the city's zoning code and the city's code of ordinances.

R109.3.14 Final inspection. A final building inspection shall be made after the prior required inspections have been completed and the final mechanical, electrical, and plumbing inspections have been made and approved by those inspection departments.

These amendments were made to Sections R109.1.1 through R109.3.14 to be more specific in content. The more specific language as to when inspections are required and what the inspector will be looking for will assist contractors with the field inspection process.

R109.4 Inspection agencies. No change in content. Re-numbered from R109.2.

R109.5 Inspection requests. No change in content. Re-numbered from R109.3.

R109.5.1 Duty to request a final inspection and obtain final approval: Upon completion of the work described in the permit application and on the approved construction documents, the permit holder shall request a final inspection and obtain final approval before any occupancy of the building or structure shall occur. Failure of the permit holder to make a timely request for a final inspection and obtain final approval shall constitute a violation of the building code, shall subject the permit holder to penalties as set forth in Section R113.4, and shall result in forfeiture to the City of any funds deposited in escrow in connection with the permit if the failure continues after 30 days written notice sent by certified mail to the last known address of the permit holder, in order to offset at least some of the costs incurred by the City as a result of such continuing failure. The building official shall be responsible for sending such notices, including to all permit holders that have failed to make a timely request for a final inspection as of the effective date of these provisions. Unless the permit holder applies in signed writing for segregated investment of its escrow deposit at the time of permit application, an escrow deposit may be invested by the City with other municipal funds and any income derived there from may be used for general revenue purposes at any time. If the permit holder applies by timely signed writing for segregated investment of its escrow deposit, the City shall segregate such funds and invest them in the same manner as allowed for municipal funds, to the extent practicable given the amount of the escrow; however, no return is assured and the City shall have no liability whatsoever other than to pay any income actually derived from such investment in the event of return of such escrow deposit. In the event of a forfeiture of an escrow deposit, any income from segregated investment shall also be forfeited.

R109.6 Approval required. No change in content. Re-numbered from R109.4.

R109.7 Coordination of inspections. Whenever in the enforcement of this code or another code or ordinance, the responsibility of more than one code official of the jurisdiction is involved, it shall be the duty of the code officials involved to coordinate their inspections and administrative orders as fully as practicable. Whenever an inspector from any agency or department observes an apparent or actual violation of some provision of some law, ordinance or code not within the inspector's authority to enforce, the inspector shall report the findings to the code official having jurisdiction.

These amendments were made to Sections R109.5.1 and R109.7 to reflect the city's present requirements.

R110.1.1 Required certificate of occupancy. Failure of the owner or tenant of a structure to obtain a certificate of occupancy as required by Section R110.1 shall be deemed a violation of this code and shall subject said owner or tenant to penalties as set forth in Section R113.4.

R110.5 Revocation of the certificate of occupancy: The certificate of occupancy shall always be subject to this code and other laws enforced by the building official. Non-compliance with the

regulations of this code and other laws enforced by the building official shall be deemed a violation subject to the penalties set forth herein, and, in addition, the building official shall be empowered to revoke the certificate of occupancy issued for the building in question, until such time as the violations are corrected and the building is in compliance with this code and the Zoning Ordinance of Creve Coeur, Missouri. The issuance of a certificate of occupancy shall not relieve the owner or tenant from compliance with all regulations of this code and other applicable regulations.

R110.6 Permanent address numbers: Every dwelling unit within the City of Creve Coeur shall have the correct street number permanently affixed on said dwelling unit so as to be clearly visible from the street in front of the property. The street number shall be a minimum of four (4) inches in height when displayed on a dwelling unit. Said street number shall be contrasting in color to that of the structure and shall be placed in proximity to the main entrance into the structure. Permanent address numbers shall be permanently affixed on a dwelling unit prior to the issuance of a certificate of occupancy.

These amendments were made to Sections R110.1.1 through R110.6 to reflect the city's present requirements.

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there is and shall remain a Building Code Board of Appeals. The board shall adopt rules of procedure for conducting its business.

R112.2 Limitations on authority. Any person shall have a right to appeal a decision of the building official to the Building Code Board of Appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent form of construction should be allowed to be used. The board shall have no authority to waive requirements of this code.

R112.3 Time limitation and filing procedure. All appeals shall be filed in writing with the building official. A written appeal may not be filed more than thirty days after the affected individuals are notified of the building official's decision.

R112.3.1 Filing fee. An application for appeal shall not be filed without full payment of the filing fee as set forth in Section R108.2.1. Said filing fee shall be refunded to the applicant if the Board reverses the decision of the building official.

R112.4 Membership of board. The Building Code Board of Appeals shall consist of five regular members, who shall be residents of the City of Creve Coeur, appointed pursuant to Section 4.4(i) of the City Charter for three-year staggered terms. To the extent possible, based on applications submitted to the City, members of the Building Code Board of Appeals should be representative of the following professions or disciplines: registered architects, builder or superintendent of building construction with ten years of experience, structural engineer, code enforcement professional, mechanical engineer, electrical engineer, civil engineer, fire protection engineer, mechanical contractor, electrical contractor, plumbing contractor, fire protection contractor, or other disciplines associated with the building trades or design professions.

R112.4.2 Chair. The Chair of the Building Code Board of Appeals shall be elected annually by members of the Building Code Board of Appeals.

R112.4.3 Secretary. The City Administrator shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the city administrator.

R112.4.4 Compensation of members. Members of the Building Code Board of Appeals shall not be compensated for service but shall be reimbursed for actual expenses pursuant to established City policy.

R112.4.5 Code of Ethics for members. All members shall be subject to the city's Code of Ethics.

R112.5 Notice of meeting. The Building Code Board of Appeals shall meet upon notice from the chair, within 5 calendar days of the filing of a written appeal with the building official, or at stated periodic meetings.

R112.6 Open hearing. All hearings before the Building Code Board of Appeals shall be open to the public. Proper public notice shall be given. The appellant, the appellant's representative, the building official, and any person whose interests are affected shall be given the opportunity to be heard.

R112.6.1 Procedure. The Board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence but shall mandate that only relevant information be received.

R112.7 Quorum. Three members of the Building Code Board of Appeals shall constitute a quorum for the purpose of hearing appeals.

R112.9 Board decision. The Building Code Board of Appeals shall only reverse or modify the decision of the building official by a majority vote of the quorum present and voting. Otherwise, the decision of the building official shall be deemed to be upheld.

R112.9.1 Notification of decision. The secretary of the board shall notify the appellant and the building official of the decision in writing.

R112.9.2 Administration. The building official shall take immediate action in accordance with the decision of the board.

R112.10 Court review: Any aggrieved person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision of the Building Code Board of Appeals in the office of the City Administrator.

These amendments were made to Sections R112.1 through R112.10 to reflect the city's present requirements.

R113.4 Violation, penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of an ordinance violation, punishable by a fine of not more than \$500, or by imprisonment not exceeding 90 days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

R114.1.1 Mud, debris or an excessive amount of surface water on streets and adjacent properties. After a verbal warning to the owner or contractor, the building official shall have the

authority to issue a stop work order to any project which is causing mud, debris or an excessive amount of surface water to be transferred to any street or adjacent property.

R114.2 Unlawful continuance. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as set forth in Section R113.4.

These amendments were made to Sections R113.4 through R114.3 to reflect the city's present requirements.

SECTION R115

UNSAFE STRUCTURES AND EQUIPMENT

R115.1 Unsafe conditions. Structures or existing equipment that are or hereafter become unsafe, unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this Section R115. A vacant structure that is not secured against entry shall be deemed unsafe.

R115.2 Record. The building official shall cause a report to be filed when there is an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

R115.3 Notice. If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order.

R115.4 Method of service. Such notice per Subsection R115.3 shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail to the owner at the last known address with the return receipt requested; or (c) delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

R115.5 Restoration. The structure or equipment determined to be unsafe by the building official shall be restored to a safe condition, unless demolition has been ordered. To the extent that repairs, alterations or additions are made or a change in occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of Section R105.2.2 of this code and Chapter 34 of 2003 edition of the International Building Code, as adopted by the City.

SECTION R116

EMERGENCY MEASURES

R116.1 Imminent danger. When, in the opinion of the building official, there is imminent danger of failure or collapse of a building or structure or any part thereof which endangers life, or when any

structure or part of a structure has fallen and life is endangered by the occupation of the building or structure, the building official is hereby authorized and empowered to order and require the occupants to vacate the same forthwith. The building official shall cause to be posted at each entrance to such structure a notice reading as follows: "This Structure is Unsafe and its Occupancy has been Prohibited by the Building Official." It shall be unlawful for any person to enter such structure except for the purpose of making the required repairs or of demolishing the same, which work shall be done at such persons' own risk.

R116.2 Temporary safeguards. When, in the opinion of the building official, there is imminent danger due to an unsafe condition, the building official may cause the necessary work to be done in an effort to render such structure secure and/or temporarily safe, whether or not the legal procedure described herein has been instituted, but neither the city nor its officials and employees shall be deemed to have guaranteed such security or safety or have any liability related to actions or omissions hereunder.

R116.3 Closing streets. When necessary for the public safety, the building official shall temporarily close structures and close, or order the authority having jurisdiction to close, sidewalks, streets, public ways, and places adjacent to unsafe structures, and prohibit the same from being used.

R116.4 Emergency repairs. For the purpose of Section R116, the building official shall employ the necessary labor and materials to perform the required work as expeditiously as possible.

R116.5 Costs of emergency repairs. Costs incurred in the performance of emergency work shall be paid by the city on approval from the building official. The city attorney of the jurisdiction shall institute appropriate action against the owner of the premises where the unsafe structure is or was located for purpose of recovering such costs and may cause a special tax lien to be placed against the property for such purposes.

These amendments were made to add Sections R115.1 through R116.5 to this code so as to be consistent with the city's present building code. St. Louis County made the same building code amendment.

SECTION 500.460 AMENDMENTS TO CHAPTER 2 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO FAMILY DWELLINGS:

– CHAPTER 2 – DEFINITIONS:

Chapter 2 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

R201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the International Building Code, International Fire Code, St. Louis County Mechanical Code, St. Louis County Electrical Code, St. Louis County Plumbing Code, International Energy Conservation Code or International Property Maintenance Code, such terms shall have the meanings ascribed to them as in those codes.

This amendment made to correctly identify the city's mechanical, electrical, and plumbing codes.

SECTION 500.470 AMENDMENTS TO CHAPTER 3 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 3 – BUILDING PLANNING:

Chapter 3 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set forth below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Ground Snow Load (lbs/sf) (f)	Wind Speed (d) (mph) (h)	Topographical Effects (k)	Seismic Design Category (f)	Weathering (a)	Frost Line Depth (b)	Termite (c)	Winter Design Temp (e)	Ice Barrier Underlayment Required (h)	Flood Hazards (g)	Air Freezing Index (i)	Mean Annual Temp (j)
20	90	NO	C	Severe	30 inches	Moderate to Heavy	2 Degrees F	YES	8/2/1995	1500 days	54 Degrees F

For SI: 1 pound per square foot = 0.0479 k/Pa, 1 mile per hour = 0.477 m/s.

Notes a. through k. No changes proposed.

The blanks in this Table were filled-in to reflect the climatic and geographic conditions of this area of the country.

R302.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exceptions:

1. A common 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses protected by an automatic residential fire sprinkler system if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.
2. A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses not protected by an automatic residential fire sprinkler system if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

Exception 2 was added because state law prohibits mandating the installation of an automatic fire sprinkler system in townhouses per Section R313.1. As a result, if someone chooses not to install a fire

sprinkler system in their townhome Exception 2 requires the additional hour of fire-resistance-rated wall construction which was previously required per the 2003 IRC.

R302.2.4 Structural independence. No changes made to the contents of this section.

Exceptions:

1 through 4. No changes made.

5. Townhomes separated by a common 1-hour or 2-hour fire-resistance-rated wall as provided in Section R302.2.

Exception 5 was amended to be consistent with Exception 2 of Section R302.2.

**TABLE R302.6
DWELLING/GARAGE SEPARATION**

SEPARATION	MATERIAL
From the residence and attic	Not less than ½ -inch Type X gypsum board or equivalent applied to the garage side
From all habitable rooms above the garage	Not less than 5/8 –inch Type X gypsum board or equivalent applied to garage ceiling joists
Structure(s) supporting floor/ceiling assemblies used for separation required by this section	Not less than 5/8 –inch Type X gypsum board or equivalent applied to supporting structure(s)
Garages located less than 3 feet from a dwelling unit on the same lot.	Not less than ½ -inch Type X gypsum board or equivalent applied to the interior side of the exterior walls that are within this area.

This Table amended to be consistent with the city's present building code.

R302.6.1 Garage attic access. An attic access located in a garage shall meet the requirements of Section R807.1 and the Type X gypsum board attic access panel shall be supported by minimum 2 inch thick by 4 inch wide nominal size lumber or by other materials approved by the building official.

This amendment was made to ensure that the attic access panel would stay in place as long as the garage ceiling during a garage fire.

R302.7 Under-stair protection. The underside of stair stringers shall be protected with a layer of ½ -inch Type X gypsum board. Enclosed accessible space under stairs shall have their walls, under-stair surface and any soffits protected on the enclosed side with ½ -inch Type X gypsum board.

This amendment was made to be consistent with the city's present building code.

R302.11 Fireblocking. No change to section language.

Amend Location 4 to read as follows:

4. At openings around vents, pipes, ducts, cables and wires at ceiling and floor levels, with an approved fire caulk tested in accordance with ASTM E814 or UL 1479 or approved

noncombustible materials tested in accordance with ASTM E136 to resist the free passage of flame and products of combustible.

Add Location 7 to read as follows:

7. To separate an unfinished basement area from a finished basement ceiling or soffit area.

This amendment was made to be consistent with the city's present building code.

R302.14 Fire protection of floors. Floor assemblies, not required elsewhere in this code to be fire-resistance rated, shall be provided with ½-inch gypsum wallboard membrane, 5/8-inch wood structural panel membrane, or equivalent on the underside of the floor framing member.

Exceptions:

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with Section P2904, NFPA 13D, or other approved equivalent sprinkler system.
2. Floor assemblies located directly over a crawl space not intended for storage or fuel-fired appliances.
3. Portions of floor assemblies can be unprotected when complying with the following:
 - 3.1. The aggregate area of the unprotected portions shall not exceed 80 square feet per story.
 - 3.2. Fire blocking in accordance with Section R302.11.1 shall be installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly.
4. Wood floor assemblies using dimension lumber or structural composite lumber equal to or greater than 2-inch by 10-inch nominal dimension, or other approved floor assemblies demonstrating equivalent fire performance.

This amendment was made to add fire-resistance protection to the underside of lightweight engineered wood products such as I-joists. When subjected to fire, these types of floor assemblies fail much sooner than floor assemblies built of dimensional lumber. During tests, Underwriter's Laboratories has found that wooden I-joists fail within 6 minutes of fire ignition. That time frame is typically less than the fire department response time from fire ignition to arrival of the fire department. Often times these lightweight floors are near the point of collapse upon arrival of the fire department. It has been documented that there is little warning of their impending collapse even with the use of thermal imaging cameras. As a result, there is an increasing number of firefighter deaths and injuries being caused by the collapse of floors that are built of lightweight, wooden I-joists. The ½-inch gypsum wallboard membrane will provide an additional 20 minutes of fire-resistance protection. This requirement will provide additional safety to firefighters and occupants which is the intent of the code per Section R101.3. Also, this section is part of the 2012 edition of the IRC.

R303.9 Kitchen exhaust. All kitchens shall be provided with a mechanical exhaust system above or adjacent to the cooking range in accordance with Section M1503 and Section M1507.3.

R305.1 Minimum height. No changes made to the contents of this section.

Exceptions:

1 and 2. No changes made.

3. Beams and girders spaced not more than 4 feet on center may project not more than 6 inches below the required ceiling height.

Exception 3 was added to be consistent with the city's present building code.

R306.5 Hose bibb. Every dwelling unit shall be provided with a minimum of one exterior, frost-proof hose bibb. Hose bibbs shall be protected from backflow in accordance with the St. Louis County Plumbing Code.

R306.6 Floor drain. A floor drain shall be installed within 15 feet of and in the same room as the heating/cooling system(s) and the hot water heater(s). Floor drains shall be installed in accordance with the St. Louis County Plumbing Code.

New Code Sections R303.9, R306.5 and R306.6 were added to be consistent with St. Louis County's adopting ordinance.

R308.4 Hazardous locations. The following shall be considered specific hazardous locations for the purposes of glazing:

1 through 3. No changes.

4. All glazing in railings regardless of an area or height above a walking surface. Included are structural baluster panels and nonstructural in-fill panels. The minimum nominal thickness of this type of glazing shall be $\frac{1}{4}$ inch.

5 through 8. No changes.

This amendment was made to add the $\frac{1}{4}$ inch thickness requirement which had been deleted.

R311.2.1 Interior egress doors. Interior egress doors shall have a minimum clear width of 29 $\frac{3}{4}$ inches and a minimum height of 78 inches. The clear width of door openings at swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Where a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 29 $\frac{3}{4}$ inches. Door openings to storage closets, bathrooms and all other nonhabitable spaces shall not be limited by the minimum width.

This amendment was made to be consistent with the city's present code. The only door the the 2009 IRC regulates is a dwelling unit's required exit door to the exterior. The minimum width or height of a dwelling unit's interior egress doors serving bedrooms, offices, recreation rooms, etc. would not be regulated unless this section were added.

R311.7.4.1 Riser height. No change to the original section. ADD:

Exception: Where the bottom riser adjoins a sloping walk or driveway which has an established grade and serves as a landing, a variation in the height of the bottom riser shall not exceed 3 inches in every 3 feet of stairway width.

This amendment was made to include the exception which had been deleted.

R312.1.1 Guards required at retaining walls. Retaining walls with differences in grade level on either side of the wall in excess of 30 inches which are located closer than 2 feet to a walk, path or driveway on the high side shall be provided with guards or other approved protective measures.

This amendment was made because the 2009 IRC is silent on this issue. This amendment is also consistent with the city's present code.

R312.3 Guard opening limitations. Required guards shall not have openings from the walking surface to the required guard height which allow passage of a sphere 4 inches (102 mm) in diameter. Guards shall not have an ornamental pattern that would provide a ladder effect. Angular intermediate balusters shall be installed at an angle 45 degrees or greater to an adjacent walking surface or stair tread.

Exceptions 1 and 2. No changes made.

This amendment was made to be consistent with the city's present code as it relates to the 'ladder effect' language. The code as written does not define ladder effect. The proposed language does. This amendment is identical to the amendment approved when the city adopted the 2003 IRC in 5/2007.

R313.1 Townhouse automatic fire sprinkler systems. A builder of townhomes shall offer any purchaser on or before the time of entering into the purchase contract the option, at the purchaser's cost, to install fire sprinklers in the townhouse. Notwithstanding any other provision of law to the contrary, no purchaser of such townhouse shall be denied the right to choose or decline to install a fire sprinkler system in such townhouse being purchased. The provisions of this section shall expire on December 31, 2019.

Exception: No changes made.

R313.2 One- and two-family dwellings automatic fire sprinkler systems. A builder of one- and two-family dwellings shall offer any purchaser on or before the time of entering into the purchase the option, at the purchaser's cost, to install fire sprinklers in the dwelling. Notwithstanding any other provision of law to the contrary, no purchaser of such one- or two- family dwelling shall be denied the right to choose or decline to install a fire sprinkler in such dwelling being purchased. The provisions of this section shall expire on December 31, 2019.

Exception: No changes made.

The amendments were made to Sections R313.1 and R313.2 to be consistent with state law.

R317.3.1 Fasteners for preservative-treated wood. Fasteners for preservative-treated wood shall be of hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper. Coating types and weights for connectors in contact with preservative-treated wood shall be in accordance with the manufacturer's recommendations. In the absence of manufacturer's recommendations, a minimum of ASTM A 653 type zinc-coated galvanized steel, or equivalent, shall be used.

Exceptions:

1. Deleted.
2. Re-numbered to Exception 1.

The proposed exception, which would allow steel bolts of one-half-inch diameter or greater to be unprotected against corrosion, does not consider the new ACQ or CB preservative-treated wood manufacturers' recommendations that all fasteners be hot-dipped galvanized steel or stainless steel.

R322.1.7 Protection of water supply and sanitary sewage systems. Substitute the reference made to the "International Private Sewage Disposal Code" with the "St. Louis County Plumbing Code".

SECTION 500.480 AMENDMENTS TO CHAPTER 4 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 4 – FOUNDATIONS:

Chapter 4 of the International Residential Code for One- and Two- Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

R403.1.4.1 Frost protection. No change to content of this subsection.

Exceptions:

1. Freestanding accessory structures with an area of 100 square feet or less and an eave height of 10 feet or less shall not be required to be protected.
2. Decks not supported by a dwelling need not be provided with footings that extend below the frost line.

This amendment was made to be consistent with the city's present code which states that structures 100 sf or less in area do not need frost protection instead of the 400 sf area and 600 sf area allowed by the IRC.

R405.1 Concrete or masonry foundations. Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity to daylight or be connected to an approved sump 15 inches in diameter and 18 inches deep with a fitted cover. A sump located in a basement with a finished area shall have a sump pump and piping installed to discharge the water to daylight. Gravel or crushed stone drains shall extend at least 1 foot beyond the outside edge of the footing and 6 inches above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of roofing paper, and the drainage tiles or perforated pipe shall be placed on a minimum of 2 inches of washed gravel or crushed rock at least one sieve larger than the tile joint opening or perforation and covered with not less than 6 inches of the same material.

Exception: A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the United Soil Classification System, Group 1 Soils, as detailed in Table R405.1.

R405.3 Special conditions. Drainage tiles, gravel or crushed stone drains, perforated pipe, or other approved systems or materials shall be placed on both the inside and the outside of the foundation in areas where a high water table exists, other severe soil-water conditions exists or water is present in the excavation. The drainage system shall be discharged by gravity to daylight or connected to an approved sump having a sump pump and piping to discharge the water to daylight.

Sections R405.1 and R405.3 were amended to be consistent with the city's present code.

R405.4 Enclosure of surface water run-off. Surface water run-off concentrated into an enclosed pipe system shall not be discharged closer than ten (10) feet to any property line without prior approval from the building official. If this method of discharge causes a drainage nuisance to an adjacent property, an alternate drainage method shall be proposed for approval by the building official.

Exception: This subsection shall not apply to enclosed pipe storm water systems of twelve (12) inches or greater in diameter that are under the jurisdiction of the City of Creve Coeur or the Metropolitan Sewer District.

This Section was added to prevent drainage nuisances caused by downspouts, footing drains, etc.

SECTION 500.490 AMENDMENTS TO CHAPTER 5 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 5 – FLOORS:

Chapter 5 of the International Residential Code for One- and Two- Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

R502.11.1 Design. Wood trusses shall be designed in accordance with approved engineering practice. The design and manufacture of metal plate connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared and sealed by a Missouri Registered Professional Engineer.

This amendment was made to be consistent with the city's present code.

R502.11.4 Truss design drawings. Truss design drawings, prepared in compliance with Section R502.11.1, shall be provided to the building official and approved prior to the issuance of the building permit. Truss design drawings shall include, at a minimum, the information specified below:
No changes proposed to Items 1 through 12.

This section was amended to be consistent with the city's present building code.

SECTION 500.500 AMENDMENTS TO CHAPTER 6 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 6 – WALL CONSTRUCTION:

Chapter 6 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is adopted without modification.

SECTION 500.510 AMENDMENTS TO CHAPTER 7 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS

– CHAPTER 7 – WALL COVERING:

Chapter 7 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition is adopted without modification.

SECTION 500.520 AMENDMENTS TO CHAPTER 8 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 8 – ROOF-CEILING CONSTRUCTION:

Chapter 8 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically

corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

R802.10.1 Truss design drawings. Truss design drawings, prepared in compliance with R802.10.2, shall be provided to the building official and approved prior to the issuance of the building permit. Truss design drawings shall include, at a minimum, the information specified below:
No changes proposed to Items 1 through 12.

R802.10.2 Design. Wood trusses shall be designed in accordance with approved engineering practice. The design and manufacture of metal plate connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared and sealed by a Missouri Registered Professional Engineer.

Sections R802.10.1 and R802.10.2 were amended to be consistent with the city's present code.

SECTION 500.530 AMENDMENTS TO CHAPTER 9 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 9 – ROOF ASSEMBLIES:

Chapter 9 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

R903.4.1 Overflow drains and scuppers. Delete the reference to the “International Plumbing Code” and substitute the “St. Louis County Plumbing Code”.

SECTION 500.540 AMENDMENTS TO CHAPTER 10 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 10 – CHIMNEYS AND FIREPLACES:

Chapter 10 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

R1004.5 Chimney separation. Factory-built chimneys shall be separated from the interior and attic spaces by a minimum layer of ½ -inch Type X gypsum board. This gypsum board shall be secured to the interior of the chimney chase from the top of the firebox to the underside of the roof deck. A minimum clearance of 2 -inches shall be maintained between the factory-built chimney and the gypsum board. All joints shall be tight and fire-taped.

R1005.7 Fireplace separation. Factory-built fireplaces shall be enclosed on all sides with a minimum layer of ½ -inch Type X gypsum board. A minimum clearance of 1 –inch shall be maintained between the factory-built fireplace and the gypsum board. All joints shall be tight and fire-taped.

Sections R1002.7 and 1004.5 were added to be consistent with the city's present code and fire district requirements.

SECTION 500.550 AMENDMENTS TO CHAPTER 11 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 11 – ENERGY EFFICIENCY:

Chapter 11 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is adopted without modification.

SECTION 500.560 AMENDMENTS TO CHAPTER 12 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:**– CHAPTER 12 – MECHANICAL ADMINISTRATION:**

Chapter 12 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is adopted without modification.

SECTION 500.570 AMENDMENTS TO CHAPTER 13 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:**– CHAPTER 13 – GENERAL MECHANICAL SYSTEM REQUIREMENTS:**

Chapter 13 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is adopted without modification.

SECTION 500.580 AMENDMENTS TO CHAPTER 14 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS.**– CHAPTER 14 – HEATING AND COOLING EQUIPMENT:**

Chapter 14 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

M1401.3 Sizing. Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building load calculations in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. The design temperatures for the City of Creve Coeur shall be in accordance with Table M1401.3.

**TABLE M1401.3
DESIGN TEMPERATURES**

	Outdoor	Inside
Winter	DB 2 degrees F	DB 70 degrees F
Summer	DB 95 degrees F WB 76 degrees F	DB 78 degrees F

SECTION 500.590 AMENDMENTS TO CHAPTER 15 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:**– CHAPTER 15 – EXHAUST SYSTEMS:**

Chapter 15 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

M1503.1 General. All kitchens shall be equipped with a means of mechanical exhaust directly over, or immediately adjacent to, a range or cook top. Range hoods shall discharge directly to the outdoors through a single-wall duct. The duct serving the hood shall have a smooth interior surface, shall be air-

tight and shall be equipped with a backdraft damper. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

Exception: Where installed in accordance with the manufacturer's installation instructions, and where mechanical or natural ventilation is otherwise provided, listed and labeled ductless range hoods shall not be required to discharge to the outdoors.

This amendment was made to clarify that kitchen ranges or cook tops are always required to have a range hood above or near them. St. Louis County made a similar amendment.

M1503.4 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute shall be provided with makeup air at a rate equal to the exhaust air rate. The cumulative exhaust flow rate of the kitchen exhaust system(s) may exceed 400 cfm if a mechanical makeup air system is installed that will provide an amount of makeup air equal to the amount of exhaust air during the operation of the kitchen exhaust system. Such makeup air systems shall be equipped with a means of closure and shall be electrically interlocked with the kitchen exhaust fan so as to operate whenever the kitchen exhaust fan is operating. Makeup air shall be tempered by an inline duct heater.

Research has shown that kitchen exhaust systems with an exhaust flow rate in excess of 400 cfm for an individual dwelling unit are greatly oversized and their continued operation can "depressurize" an airtight home to the point that 'backdrafting' of carbon monoxide gases from gas-fired appliances and wood-burning fireplaces back into the home can occur. Depressurization can also adversely affect indoor air quality by air being drawn from garages, mechanical rooms and storage rooms. The exception was recommended by several area mechanical contractors who have stated that this is the most effective method of providing the required makeup air to a residential kitchen exhaust system.

SECTION 500.600 AMENDMENTS TO CHAPTER 16 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

–CHAPTER 16 – DUCT SYSTEMS:

Chapter 16 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition is adopted without modification.

SECTION 500.610 AMENDMENTS TO CHAPTER 17 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 17 – COMBUSTION AIR:

Chapter 17 of the International Residential Code for One- and Two-Family Dwellings, 2003, Second Edition is adopted without modification.

SECTION 500.620 AMENDMENTS TO CHAPTER 18 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 18 – CHIMNEYS AND VENTS:

Chapter 18 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

M1801.1 Venting required. Add "Exception: Unvented appliances where the manufacturer's instructions require a window to be open during the operation of the appliance shall be prohibited."

SECTION 500.630 AMENDMENTS TO CHAPTER 19 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:**– CHAPTER 19 – SPECIAL FUEL-BURNING EQUIPMENT:**

Chapter 19 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is adopted without modification.

SECTION 500.640 AMENDMENTS TO CHAPTER 20 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:**– CHAPTER 20 – BOILERS AND WATER HEATERS :**

Chapter 20 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is adopted without modification.

SECTION 500.650 AMENDMENTS TO CHAPTER 21 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:**-- CHAPTER 21 – HYDRONIC PIPING:**

Chapter 21 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set forth below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

M2101.11 Joints between different piping materials. Joints between different piping materials shall be made with approved adapter fittings. Joints between different metallic piping materials shall be made with approved dielectric fittings or brass converter fittings.

This amendment was made for clarification purposes. St. Louis County has the same amendment.

SECTION 500.660 AMENDMENTS TO CHAPTER 22 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TW-FAMILY DWELLINGS:**– CHAPTER 22 – SPECIAL PIPING AND STORAGE SYSTEMS:**

Chapter 22 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is adopted without modification.

SECTION 500.670 AMENDMENTS TO CHAPTER 23 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:**– CHAPTER 23 – SOLAR SYSTEMS:**

Chapter 23 of the International Residential Code for One- and Two-Family dwellings, 2009, Fourth Edition, is adopted without modification.

SECTION 500.680 AMENDMENTS TO CHAPTER 24 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:**– CHAPTER 24 – FUEL GAS:**

Chapter 24 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

G2402.3 (201.3) Terms defined in other codes. Where terms are not defined in this code and are defined in the International Building Code, St. Louis County Electrical Code, St. Louis County Plumbing

Code, St. Louis County Mechanical Code, International Energy Conservation Code or International Fire Code such terms shall have the meanings ascribed to them in those codes.

This amendment was made to properly reference St. Louis County's electrical, plumbing and mechanical codes.

G2439.5.5.1 (614.6.5.1) Specified length. The maximum length of the exhaust duct shall be 25 feet (7620 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table G2439.5.5.1.

This amendment was made so that the 25 feet exhaust duct length would be consistent with Section 1502.4.4.1.

SECTION 500.690 AMENDMENTS TO CHAPTER 25 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 25 – PLUMBING ADMINISTRATION:

Chapter 25 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2501.1 Scope. The St. Louis County Plumbing Code shall regulate plumbing administration.

P2501.2 through P2503.9. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates plumbing work within our city.

SECTION 500.700 AMENDMENTS TO CHAPTER 26 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 26 – GENERAL PLUMBING REQUIREMENTS:

Chapter 26 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, sub-section, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, sub-section, or clause number in the code is hereby enacted and added thereto.

P2601.1 Scope. The St. Louis County Plumbing Code shall regulate general plumbing requirements.

P2601.2 through P2608.5. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates plumbing requirements within our city.

SECTION 500.710 AMENDMENTS TO CHAPTER 27 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 27 – PLUMBING FIXTURES:

Chapter 27 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically

corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2701.1 Scope. The St. Louis County Plumbing Code shall regulate the installation of plumbing fixtures.

P2702.1 through P2724.1. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates the installation of plumbing fixtures within our city.

SECTION 500.720 AMENDMENTS TO CHAPTER 28 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 28 – WATER HEATERS:

Chapter 28 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2801.1 Scope. The St. Louis County Plumbing Code shall regulate the installation of water heaters.

P2801.2 through P2803.7. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates the installation of water heaters within our city.

SECTION 500.730 AMENDMENTS TO CHAPTER 29 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 29 – WATER SUPPLY AND DISTRIBUTION:

Chapter 29 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2901.1 Scope. The St. Louis County Plumbing Code shall regulate the installation of water supply and distribution systems.

P2902.1 through P2908.3. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates the installation of water supply and distribution systems within our city.

SECTION 500.740 AMENDMENTS TO CHAPTER 30 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 30 – SANITARY DRAINAGE:

Chapter 30 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or

amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

P3001.1 Scope. The St. Louis County Plumbing Code shall regulate the installation of sanitary drainage systems.

P3001.2 through P3008.5. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates the installation of sanitary drainage systems within our city.

SECTION 500.750 AMENDMENTS TO CHAPTER 31 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 31 -- VENTS :

Chapter 31 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

P3101.1 Scope. The St. Louis County Plumbing Code shall regulate the installation of plumbing vent systems.

P3101.2 through P3114.8. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates the installation of plumbing vent systems within our city.

SECTION 500.760 AMENDMENTS TO CHAPTER 32 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 32 – TRAPS:

Chapter 32 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

P3201.1 Scope. The St. Louis County Plumbing Code shall regulate the installation of plumbing traps.

P3201.2 through P3201.7. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates the installation of plumbing traps within our city.

SECTION 500.770 AMENDMENTS TO CHAPTER 33 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 33 – STORM DRAINAGE:

Chapter 33 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or

amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

P3301.1 Scope. The St. Louis County Plumbing Code shall regulate the materials, design, construction and installation of storm drainage.

P3302.1 through P3303.1.4. Delete.

These amendments were made to identify the St. Louis County Plumbing Code as the plumbing code that regulates the materials, design, construction and installation of storm drainage within our city.

SECTION 500.780 AMENDMENTS TO CHAPTER 34 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 34 – GENERAL ELECTRICAL REQUIREMENTS:

Chapter 34 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E3401.2 Scope. The St. Louis County Electrical Code shall regulate general electrical requirements.

E3401.3 through E3407.4.2. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates general electrical requirements within our city.

SECTION 500.790 AMENDMENTS TO CHAPTER 35 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 35 – ELECTRICAL DEFINITIONS:

Chapter 35 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E3501.1 Scope. The St. Louis County Electrical Code shall regulate definitions applicable to electrical requirements.

DEFINITIONS. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates electrical definitions as they pertain to electrical work within our city.

SECTION 500.800 AMENDMENTS TO CHAPTER 36 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

– CHAPTER 36 – ELECTRICAL SERVICES:

Chapter 36 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or

amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E3601.1 Scope. The St. Louis County Electrical Code shall regulate the installation of electrical services.

E3601.2 through E3611.5. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates the installation of electrical services within our city.

SECTION 500.810 AMENDMENTS TO CHAPTER 37 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 37 – ELECTRICAL BRANCH CIRCUITS AND FEEDER REQUIREMENTS:

Chapter 37 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E3701.1 Scope. The St. Louis County Electrical Code shall regulate the installation of electrical branch circuits and feeders.

E3701.2 through E3706.5. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates the installation of electrical branch circuits and feeders.

SECTION 500.820 AMENDMENTS TO CHAPTER 38 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 38 – ELECTRICAL WIRING METHODS:

Chapter 38 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E3801.1 Scope. The St. Louis County Electrical Code shall regulate electrical wiring methods.

E3801.2 through E3803.11. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates electrical wiring methods within our city.

SECTION 500.830 AMENDMENTS TO CHAPTER 39 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 39 – ELECTRICAL POWER AND LIGHTING DISTRIBUTION:

Chapter 39 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E3901.1 Scope. The St. Louis County Electrical Code shall regulate the installation of electrical power and lighting distribution systems.

E3901.2 through E3909.4. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates electrical power and lighting distribution systems within our city.

SECTION 500.840 AMENDMENTS TO CHAPTER 40 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 40 – ELECTRICAL DEVICES AND LUMINAIRES:

Chapter 40 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E4001.1 Scope. The St. Louis County Electrical Code shall regulate the installation of electrical devices and luminaires.

E4001.2 through E4005.6. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates the installation of electrical devices and luminaires within our city.

SECTION 500.850 AMENDMENTS TO CHAPTER 41 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 41 – ELECTRICAL APPLIANCE INSTALLATION:

Chapter 41 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below.. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E4101.1 Scope. The St. Louis County Electrical Code shall regulate the installation of electrical appliances.

E4101.2 through E4101.7. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates the installation of electrical appliances within our city.

SECTION 500.860 AMENDMENTS TO CHAPTER 42 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 42– SWIMMING POOLS:

Chapter 42 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E4201.1 Scope. The St. Louis County Electrical Code shall regulate the installation of electrical wiring and equipment associated with swimming pools, wading pools, hot tubs and spas and fountains.

E4201.2 through E4209.4. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates the installation of electrical wiring and equipment associated with swimming pools, etc. within our city.

SECTION 500.870 AMENDMENTS TO CHAPTER 43 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 43 – CLASS 2 REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS:

Chapter 43 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

E4301.1 Scope. The St. Louis County Electrical Code shall regulate the installation of electrical Class 2 remote-control, signaling and power-limited circuits.

E4301.2 through E4304.5. Delete.

These amendments were made to identify the St. Louis County Electrical Code as the electrical code that regulates the installation of wiring and circuits associated with thermostats, door bells, security systems, etc.

SECTION 500.875 AMENDMENTS TO CHAPTER 44 OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- CHAPTER 44 – REFERENCED STANDARDS:

Chapter 44 of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, and amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section R102.4.

R4401.1 Deleted sections. The standards referenced by sections previously deleted by this amending ordinance are also hereby deleted.

ICC – International Code Council
5203 Leesburg Pike, Suite 600
Falls Church, VA 22041

Standard reference number code section number	Title	Referenced in
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DELETE: IPC – 09	International Plumbing Code	
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ADD: Plumbing Code – made. City Ordinance No. 5214	St. Louis County Plumbing Code	No changes
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No other changes to this referenced standard are proposed.

NFPA – National Fire Protection Association

Batterymarch Park
Quincy, MA 02269

Standard reference number code section number	Title	Referenced in
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DELETE: 70-08	National Electrical Code	
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No other changes to this referenced standard are proposed.

ADD: Electrical Code – made. City Ordinance No. 5214	St. Louis County Electrical Code	No changes
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These amendments were made to be consistent with other amendments previously made.

SECTION 500.880 AMENDMENTS TO APPENDIX G OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS:

-- APPENDIX G – SWIMMING POOLS, SPAS AND HOT TUBS:

Appendix G of the International Residential Code for One- and Two-Family Dwellings, 2009, Fourth Edition, is amended as set forth below. Each section, subsection, or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection, or clause number in the code is hereby enacted and added thereto.

AG103.4 Drainage systems. The swimming pool shall be equipped to be emptied completely of water and the equipment shall be equipped to be properly flushed. Any discharged or flushed water shall be disposed of onto an adjacent street or in an approved manner that will not create a nuisance to adjoining property.

This section was added so that the city could regulate the disposal of pool water in an approved manner. The city's present building code is silent on this manner.

AG105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

Items 1 through 9. No changes proposed.

Item 10. Where an aboveground pool structure is used as a pool barrier or where the barrier is mounted on top of the pool structure, and the means of pool access is a ladder or steps, then the ladder or steps

shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 9. A removable ladder shall not constitute an acceptable alternate to enclosure requirements.

Item 11. There shall be a clear zone of at least 4 feet between the barrier and any permanent structures or pool equipment located outside of the pool, hot tub or spa area that can be used to climb the barrier.

Item 10 was amended to not allow removable ladders to as part of the barrier. This is consistent with the city's present code. St. Louis County also amended this section.

Item 11 was added to clarify the fact that there should be no permanent structures (retaining walls, pool equipment, play equipment, etc.) close enough to a pool barrier that would enable a child to use the structure to climb over the barrier. St. Louis County made this same addition.

SECTION 2: SAVING CLAUSE: Nothing in this ordinance or in the Building Code hereby adopted, shall be construed to affect any suit or proceeding currently pending in any court as of the effective date hereof, or any rights previously acquired or liability previously incurred, or any cause or causes of action existing under any ordinance hereby repealed, as cited herein.

SECTION 3: SEVERABILITY: If any section, subsection, provision, sentence, clause, or phrase of this ordinance or of the ICC International Residential Code for One- and Two-Family Dwellings, Fourth Edition, 2009, is, for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this ordinance or of said code, and the City of Creve Coeur City Council hereby declares that it would have passed the same , even though such portion so held to be unconstitutional had not been included therein.

SECTION 4: EFFECTIVE DATE: This ordinance shall become effective **July 1, 2013**, pursuant to section 3.11(g) of the City Charter.

Adopted by the City Council this ___ day of _____, 2013.

ROBERT HOFFMAN
PRESIDENT OF THE CITY COUNCIL

Approved this ___ day of _____, 2013.

BARRY GLANTZ
MAYOR

ATTEST:

DEBORAH RYAN, MPCC
CITY CLERK

MEMORANDUM

TO: Mark Perkins, City Administrator

FROM: Steve Unser, Chief Building Official

CC: Paul Langdon, Director of Community Development

DATE: May 8, 2013 (amended May 23, 2013)

RE: Building Division's Draft of a City Ordinance to
Amend and Adopt the 2009 International Residential Code as
the City's New Building Code for One- and Two-Family
Dwellings.

Please find attached the aforementioned draft for review, comments and approval. St. Louis County and the majority of municipalities within St. Louis County have adopted or are in the process of adopting this building code as their new building code for One- and Two-Family Dwellings. In the interest of code enforcement consistency throughout our region, the building division is recommending that the City of Creve Coeur do the same. This code regulates the construction, alteration, movement, enlargement, replacement, repair, location and demolition of detached one- and two-family dwellings and townhouses not more than 3 stories in height with a separate means of egress. Residential dwelling units more than 3 stories in height or that share a means of egress are regulated by the 2009 International Building Code.

Please note that an explanation for each amendment is written in *italics* and underlined after each proposed amendment. These "explanations" will be removed from the body of the ordinance prior to its adoption.

On December 11, 2012, this draft of this proposed ordinance was filed with the City Clerk's office and made available for public inspection and examination pursuant to Section 67.280 RSMo. On December 11, 2012, this draft was posted on the city's website for public review. Also on December 13, 2012, printed copies of this draft were mailed to members of the city's Building Code Board of Appeals and the Homebuilder's Association of Greater St. Louis. Printed copies were also made available at the building division's public counter.

See attached Exhibit A for the Building Code Board of Appeals recommendation to adopt this code as proposed.

See attached Exhibit B for Caryl Kinsey Fox's recommendation to adopt this code as proposed.

The city requested that any comments from all interested parties regarding this draft be submitted to the building department for review within thirty (30) days of the date of it being made public. These review comments will be shared with the city administrator and city council for possible inclusion into a revised draft.

See attached Exhibit C for the 2/13/13 comments from the Homebuilders Association of Greater St. Louis and the 3/13/13 responses from the Building Division.

See attached Exhibit M for the 4/17/13 letter from the HBA regarding city staff's disapproval of HBA's recommendations.

See attached Exhibit D for the 3/8/13 comments from Richard Kutta and the 4/8/13 responses from the Building Division.

AMENDMENTS OF NOTE

There are numerous amendments proposed during a new building code adoption process. While most of these amendments are administrative or technical in nature, some merit additional attention.

Referenced page numbers are from the proposed ordinance.

Section R106.1.1.1 Residential Fire Sprinkler Option Form (See page 4.)

This amendment was made to be consistent with a state law that prohibits cities from mandating that new homes and townhomes be equipped throughout with an automatic fire sprinkler system as required by Sections R313.1 and R313.2 of the 2009 IRC. This form needs to be signed by the homebuilder and the purchaser affirming that a fire sprinkler system was offered to the purchaser prior to the purchase contract.

Section R108.2.1 Building Code Board of Appeals filing fee. (See page 5.)

Applicant will have the filing fee refunded if the board rules in the applicant's favor.

Sections R109.3 through R109.3.14 Required inspections. (See pages 6 and 7.)

More specific language was added to better communicate field inspection requirements to contractors so as to expedite the building inspection process.

Sections R112.1 through 112.10 Board of Appeals. (See pages 9 and 10.)

These amendments were made to 'streamline' the appeals process.

R302.2 Townhouses. (See page 13)

Exception 2 was added because state law prohibits mandating the installation of an automatic fire sprinkler system in townhouses. See further explanation in *italics*.

R302.14 Fire protection of floors. (See page 15)

This amendment was made to add fire-resistant protection to the underside of lightweight engineered wood products such as I-joists. When subjected to fire, these types of floor assemblies fail much sooner than floor assemblies built of dimensional lumber. During tests, Underwriter's Laboratories has found that unprotected wood I-joists fail within 6 minutes of fire ignition (**See Exhibit E**). That time frame is typically less than the fire department response time from fire ignition to their arrival. Often times, these lightweight floors are near the point of collapse upon arrival of the fire department. As a result, there are an increasing number of firefighter injuries and deaths being caused by the collapse of lightweight, wooden I-joist floor systems involved in a fire (**See Exhibit F**). By comparison, unprotected dimensional lumber floor systems (using 2 x 10 floor joists) do not fail until 18 minutes 45 seconds after fire ignition (**See Exhibit E**). The ½ -inch gypsum wallboard membrane required by this code section will provide an additional 20 minutes of fire-resistant protection. This requirement will provide additional safety to firefighters and residents during a fire event. The additional costs of installing this gypsum wallboard membrane will be more than offset by the additional safety it will provide to firefighters during rescue operations and to residents attempting to escape during a home fire.

NOTE: This code section already appears in the 2012 edition of the International Residential Code. When this code change was proposed at the 2010 International Code Council's Code Change Hearings, one of its proponents was the National Association of Home Builders (**See Exhibit G**). APA- The Engineered Wood Association, who helps to oversee the manufacturing and performance of engineered wood products (including I-joists) recommended in their November 2007 TECHNICAL TOPICS publication "the use of a single layer of ½ -inch thick gypsum on the underside of all I-joists used in floor/ceiling assemblies over habitable spaces" to increase the fire resistance of I-joist floor systems (**See Exhibit H**). Since the city is not adopting the 2012 edition of the IRC, the building division believes that this code section's inclusion into the proposed building code is necessary.

See also Exhibit I - Creve Coeur Fire Protection District's approval of this proposed code section. The 3/18/2013 article reference in this letter is EXHIBIT F.

See also Exhibit J- Monarch Fire Protection District's approval of this proposed code section.

Other jurisdictions that have made this same amendment are as follows:

- City of Frontenac

- City of Richmond Heights
- Fenton Fire Protection District

SIGNIFICANT BUILDING CODE CHANGES

Every 3 years a new residential building code is published by the International Code Council. The International Residential Code is kept up to date through the review of proposed code changes submitted by code enforcement officials, industry representatives, design professionals and other interested parties. Proposed code changes are carefully considered through an open code development process in which all interested and affected parties may participate. A consensus is reached for each proposed code change by a majority vote of members at the ICC Code Change Hearings which are held twice a year (spring/fall) at various cities.

The intent of the city has been to adopt the building code as written through this model code development process and to ensure that any amendments proposed by the building division will not be less restrictive than the minimum regulations contained in the published International Residential Code.

R312.1 GUARDS WHERE REQUIRED

This code change clarifies that when determining the required minimum height of a guard, fixed seating (built-in benches on a deck) is considered a walking surface and the required guard height is measured from the seat to the top of the guard. Also, in determining when a guard is required, the vertical distance from the walking surface to the grade or floor below is measured to the lowest point within 36 inches horizontally from the edge of the open-sided walking surface.

R315 CARBON MONOXIDE ALARMS

This new section requires that within new homes and within existing homes where work requiring a building permit occurs, a carbon monoxide detector shall be installed in the immediate vicinity of the bedrooms. The intent of this section is to reduce accidental deaths from carbon monoxide poisoning. The carbon monoxide detectors are not required to be hard-wired or interconnected like smoke detectors. UL listed, plug-in or battery-powered CO detectors are acceptable.

R323 STORM SHELTERS

This new section does not require storm shelters to be built. However, if installed they are required to be constructed in accordance with this section. Storm shelters protect persons from injury due to flying debris during a tornado, hurricane or other high-wind event.

R612.2 WINDOW SILLS

This new section requires that operable windows have a minimum sill height of 24 inches above the finish floor when the sill is more than 72 inches above the finished grade or surface below. This requirement is intended to prevent small children from

falling out of open windows. The minimum sill height may be lowered if the window meets one of the four exceptions listed.

CHAPTER 11 ENERGY EFFICIENCY

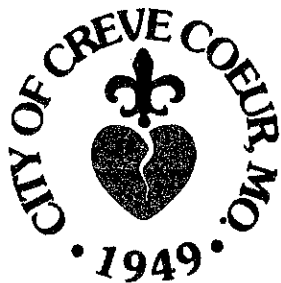
Please see **Exhibit K - for a summary of significant changes that will be made to Chapter 11 of the city's present residential code (2003 IRC) by the city's adoption of the proposed residential code (2009 IRC).**

Please see **Exhibit L - for a summary of the 'true cost' of the 2009 International Energy Conservation Code and Chapter 11 – Energy Efficiency – of the 2009 International Residential Code.** These increased construction costs (\$1,519) are based on a 2,400 square foot home. This works out to be an increased cost of \$0.63 per square foot. Another increased cost not included in this exhibit is approximately \$300 for the Blower Door Test required to test the air tightness of the building envelope. This would increase the average increased construction cost of a new 2,400 square foot home to \$1,819 or \$0.75 per square foot. The average size of a new home in Creve Coeur is approximately 3,000 – 4,000 square feet. This works out to be an increased cost of \$2,250 - \$3,000 for a new Creve Coeur home to be built in compliance with the 2009 IECC or Chapter 11 – Energy Efficiency – of the 2009 IRC. This same exhibit points out that the monthly energy savings realized by complying with these new requirements would be \$28.06 for a 2,400 square foot new home. The monthly energy savings for a new home that is 3,000 – 4,000 square feet in size would be approximately \$33 - \$44.

Stronger energy –efficient construction also helps to reduce pollution by reducing energy consumption.

M1503.4 MAKE-UP AIR REQUIRED

This code change reduces the maximum exhaust rate allowed for kitchen exhaust systems from 600 cfm to 400 cfm as the threshold for requiring make-up air. Research has shown that kitchen exhaust systems with an exhaust flow rate greater than 400 cubic feet per minute are oversized and their continued operation can 'depressurize' an airtight home to the point where 'backdrafting' of carbon monoxide gas from gas-fired appliances and wood burning fireplaces can occur. This 'depressurization' could also affect indoor air quality by drawing air from garages, mechanical rooms and storage rooms.



city
of

CREVE COEUR

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(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

EXHIBIT A

April 15, 2011

Mayor and Council Members
Creve Coeur Government Center
300 N. New Ballas Road.
Creve Coeur, MO 63141

RE: Building Code Board of Appeals Review of the Rough Drafts of the City
Ordinances being proposed to adopt the City's New Building Codes.

Dear Mayor and Council Members;

The Building Code Board of Appeals was asked by the Chief Building Official on December 11, 2012, to review the aforementioned ordinances that will amend and adopt the 2009 edition of the International Residential Code as our city's new building code for One- And Two-Family Dwellings, the 2009 edition of the International Building Code as our city's new commercial building code and the 2009 edition of the International Energy Conservation Code as our city's new energy conservation code.

Upon careful review of the aforementioned proposed ordinances and after our public meeting held on April 3, 2013, to further discuss these ordinances with each other and the Chief Building Official, the Building Code Board of Appeals recommends adoption of all three (3) of these proposed ordinances as written.

Thank you for your consideration of this recommendation.

Sincerely,

Building Code Board of Appeals
Bernard Colton, Chairperson

C A R Y L K I N S E Y F O X, AIA, LEED BD+C
4 6 1 P I N E B E N D D R I V E
W I L D W O O D M O 6 3 0 0 5
ckinseyfox@gmail.com
C. 310.428.1357

March 5, 2013

EXHIBIT B

Steve Unser
City of Creve Coeur
300 N. New Ballas Road
Creve Coeur, MO 63141

RE: Adoption of the 2009 I-Codes and International Energy Conservation Code

Dear Steve,

As an Architect, registered in Missouri, New York and California, I serve on the national committee of the AIA, American Institute of Architects, Codes and Standards Committee where I was the 2012 Chair. I am writing in support of Creve Coeur's adoption of the 2009 I-Codes including the International Energy Conservation Code (IECC). These are the codes that have been adopted by the City and County of St. Louis and represent the standard of construction expected by the building industry in the St. Louis Metropolitan area.

The I-Codes are the only set of building codes in the US and represent the best practices as decided by a consensus of the building industry. They are written with public safety in mind and are fully coordinated to address all building conditions. Editing or modifying specific sections of these codes could create serious conflicts or gaps in overall building safety.

For example, when the State of Missouri eliminated the requirement for fire sprinklers, they did not take into consideration that fire separations between occupants was removed from the code. The expectation was that entire buildings would be sprinkled eliminating the need for fire separations. This throws into confusion who becomes liable when fire spreads throughout a building, the builder who talked the owner out of installing the sprinklers or the designer who designed to the building code. For this reason, it is the position of the American Institute of Architects that the building codes should be adopted **without modifications**.

I am also a resident of Wildwood and attend St. Timothy's Episcopal Church at 808 N. Mason Road. Creve Coeur has a great reputation of being a conscientious community with high quality residential construction. For these reasons, I strongly support the adoption of the 2009 IECC.

The Energy Code requires minimum acceptable levels of construction including good insulation, windows and doors, as well as caulking and weatherstripping the gaps in construction. These do not add significantly to the cost of construction but do

contribute to the overall comfort of living in a home. The code also requires programable thermostats as well as efficient lighting, heating and air conditioning systems which lower operational expenses. For these reasons, I consider the IECC to be a type of consumer protection, ensuring that homeowners get a good quality home and lower energy bills for the long term.

Again, I point out that St. Louis City and County have been using the 2009 I-Codes since the end of 2011 and Missouri is one of the few states that does not have a statewide building code. Please take swift action to adopt these newer I-Codes.

Illinois and the Kansas City metro area have adopted the 2012 I-Codes including the Energy Code. Many other municipalities in our region have also adopted the 2009 IECC including, Clayton, Webster Groves, Florissant, Hazelwood, Lake St. Louis, O'Fallon, St. Charles, Troy and Wentzville.

In the end, homeowners are the biggest winners in the adoption of energy codes and for that reason, the American Institute of Architects are firmly in support of Creve Coeur Adopting the 2009 IECC.

Please feel free to contact me with any specific questions you need answered.

Caryl Kinsey Fox, AIA, LEED AP, BD&C

EXHIBIT C

RECEIVED

FEB 13 2013

RECEIVED

FEB 13 2013

BUILDING DEPT.

HBA Recommended Change to ~~Creve Coeur~~ Draft Ordinance

Recommendation 1:

Revise as follows:

R302.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exceptions:

1. A common 1-hour fire-resistance-rate wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses protected by an automatic residential fire sprinkler system if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 to 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.
2. A common 2-hour fire-resistance-rates wall assembly or a two 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses not protected by an automatic residential fire sprinkler system if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R 302.4.

Reason:

The HBA agrees with the intent of the code change. However, the HBA has recommended the option of a two one-hour fire-rated wall assemblies to help address concerns with property law. Technically, there is a property line between townhomes that runs through the middle of the shared interior wall. Therefore, by allowing two one-hour walls, residents will be able to address issues to their property without affecting their neighbors.

Cost Impact:

Minimal

City's Response:

The recommended change to Exception 2 is unnecessary. Section R302.2's reference to Section R302.1 for exterior walls already accomplishes what is recommended.

1.

Recommendation 2:**Revise as follows:**

R302.7 Under-stair protection. The underside of stair stringers shall be protected with a layer of ½ inch Type X gypsum board. Enclosed accessible space under stairs shall have their walls, under-stair and any soffits protected on the enclosed side with ½ inch Type X gypsum board.

Reason:

HBA recommends the deletion of the Type X requirement in order to match the code change recommended in 302.14, as regular gypsum will still provide additional protection for stairways in the event of a fire.

Cost Impact:

\$300.00 to \$500.00 depending on whether it is a straight run or switch back stair run.

City's Response:

The requirement for Type X gypsum board at this location has been in the city's building code since 5/29/2007. ½ inch gypsum board provides 15 minutes of protection to the stair stringers when exposed to a fire. ½ inch Type X gypsum board provides 25 minutes of protection to the stair stringers when exposed to a fire. That's 10 additional minutes of escape time for residents and 10 additional minutes of rescue time for firefighters during the course of a home fire.

Recommendation 3:**Revise as follows:**

R302.14 Fire protection of floors. ~~Floor assemblies, not required elsewhere in this code to be fire-resistance-rated, shall be provided with ½ inch gypsum wallboard membrane, 5/8-inch wood structural panel membrane, or equivalent on the underside of the floor framing member.~~

Exceptions:

- ~~1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with Section P2904, NFPA 13D, or other approved equivalent sprinkler system.~~
- ~~2. Floor assemblies located directly over a crawl space not intended for storage or fuel-fired appliances.~~
- ~~3. Portions of floor assemblies can be unprotected when complying with the following:~~
 - ~~a. The aggregate area of the unprotected portions shall not exceed 80 square feet per story.~~
 - ~~b. Fire blocking in accordance with Section R302.11.1 shall be installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly.~~

4. ~~Wood floor assemblies using dimension lumber or structural composite lumber equal to or greater than 2-inch by 10-inch nominal dimension or other approved floor assemblies demonstrating equivalent fire performance.~~

Reason:

HBA members and staff would appreciate the opportunity to discuss the reasoning behind this recommended code change in person.

Cost Impact:

Varies with home size and design but approximately \$4,000 to \$5,000.

City's Response:

The city's amendment to add new section R302.14 was made to add fire resistance rating to the underside of lightweight engineered wood products such as I-joists. When subjected to fire, these types of floor assemblies fail much sooner than floor assemblies built of dimensional lumber. During tests, Underwriter's Laboratories found that wooden I-joists fail within 6 minutes of fire ignition. That time frame is typically less than the fire department response time from fire ignition to arrival of the fire department. Often times these lightweight floors are near the point of collapse upon arrival of the firefighters. It has been documented there is little warning of their impending collapse even with the use of thermal imaging cameras. As a result, there is an increasing number of firefighter deaths and injuries being caused by the collapse of floors that are built of lightweight, wooden I-joists. The ½ inch gypsum wallboard membrane will provide an additional 20 minutes of fire-resistance protection. This requirement will provide additional safety to firefighters and residents which is the intent of the building code per section R101.3. Also this section is part of the 2012 edition of the IRC.

Recommendation 4:

R311.2.1 Interior egress doors. Interior egress doors shall have a minimum clear width of 29 ¾ inches and a minimum height of 78 inches. The clear width of door openings at swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Where a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 29 ¾ inches. Door openings to storage closets, bathrooms, and other non-habitable spaces shall not be limited by the minimum width.

Reason:

Necessity for this code requirement is unclear.

Cost Impact:

Varied

City's Response:

This code requirement has been in the city's building code since 1995. The only door the 2009 IRC regulates is the dwelling unit's required exit door to the exterior. The minimum

width or height of a dwelling unit's interior egress doors serving bedrooms, offices, recreation rooms, etc. would not be regulated unless this section were added.

Recommendation 5:

R1004.5 Chimney separation. Wood burning factory built chimneys shall be separated from the interior and attic spaces by a minimum layer of ½-in Type X gypsum board. This gypsum board shall be secured to the interior of the chimney chase from the top of the firebox to the underside of the rood deck. A minimum clearance of 2-inches shall be maintained between the factory-built chimney and the gypsum board. All joints shall be tight and fire-taped. Gas appliance direct-vent or vent-free fire places shall be installed as per manufacturer's directions.

Reason:

It has been the experience of industry experts that it is best to install factory built chimneys as per manufacturer's instructions.

Cost Impact:

Varied

City's response:

There are factory-built fireplaces that are UL listed to burn wood or house gas-fired log heaters (appliances). Since a resident may burn wood or install a gas-fired appliance in the same factory-built fireplace, the city believes that when a factory-built chimney is initially installed it should be protected to the most hazardous condition that may occur.

Recommendation 6:

R1005.7 Fireplace separation. Factory-built wood-burning fire places shall be enclosed on all sides with a minimum layer of ½-inch Type X gypsum board. A minimum clearance of 1-inch shall be maintained between the factory-built fireplace and the gypsum board. All joints shall be tight and fire taped. Gas appliances that are direct-vent or vent-free shall be installed as per manufacturer's instructions.

Reason:

It has been the experience of industry experts that it is best to install factory built chimneys as per manufacturer's instructions.

Cost Impact:

Varied

City's Response:

See response to Section R1004.5 above.

Recommendation 7:

M1401.3 Sizing. Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building load calculations in accordance with ACCA Manual

5.

J and other approved heating and cooling calculation methodologies. The design temperatures for the City of Creve Coeur shall be in accordance with Table M1401.3.

Table M1401.3
Design Temperatures

	Outdoor	Inside
Winter	DB 2 degrees F	DB 70 degrees F
Summer	DB 95 degrees F WB 76 degrees F	DB 78 degrees F

Reason:

The HBA believes that the manuals listed provide more than adequate methodologies, and industry experts noted that the temperatures outlined here will not change the load design of the HVAC system of the home.

Cost Impact:

N/A

City's Response:

This amendment proposed by the city is consistent with the amendment made by St. Louis County when they adopted the 2009 IRC.

Recommendation 8:

~~**M1503.4 Makeup air required.** Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute shall be provided with makeup air at a rate equal to the exhaust air rate. The cumulative exhaust flow rate to the kitchen exhaust system(s) may exceed 400 cfm if the range hood or down-draft exhaust system provided is equipped with a built-in mechanical makeup air system that will provide an amount of makeup air equal to the amount of exhaust air interlocked with the kitchen exhaust fan so as to operate whenever the kitchen exhaust fan is operating. Makeup air shall be tempered by an inline duct heater.~~

Reason:

See HBA recommended code amendment 1503.4.

City's Response:

Research has shown that kitchen exhaust systems with an exhaust flow rate in excess of 400 cfm for an individual dwelling unit are greatly oversized. The industry recommendation is a minimum 40 cfm exhaust rate per linear foot of cooktop. A 48 inch wide cooktop can be adequately served by an exhaust system that has an exhaust system rate of 160 cfm. The continued operation of a kitchen exhaust system with an exhaust flow rate in excess of 400 cfm can "depressurize" an air-tight home to the point that "backdrafting" of carbon monoxide gases from gas-fired appliances and woodburning fireplaces can occur. This code requirement is recommended by several mechanical contractors who have stated that the 400 cfm threshold is reasonable and that any exhaust system greater than 400 cfm resembles a commercial-type range hood that is required to be provided with make-up air.

6.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R106.3.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

Approval of Construction documents. When the *building official* issues a *permit*, the *construction documents* shall be *approved* in writing or by a stamp which sets "REVIEWED FOR CODE COMPLIANCE." One set of *construction documents* so reviewed shall be retained by the building official. The other set shall be returned to the applicant, ~~shall be kept at the site of work~~ may be kept at the site of work or made available at time of inspection and shall be open to inspection by the building official or his or her authorized representative.

Reason:

Unfortunately, it is not always possible to maintain records on a construction site, especially in the beginnings of the construction process when materials and other important documents are easily subject to theft. However, records are always maintained and can be made available to any building official or representative upon request.

Cost Impact:

Copy costs \$7 to \$60 – varies with complexity of copy and administrative costs (delivery and return of annotated copy costs approximately \$20).

City's Response:

The city has always required that the city-approved plans be kept on site until the final inspection is approved. The inspectors need to refer to these approved plans during the course of their inspections.

7.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: R108.6

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

Work commencing before permit issuance. Any person who commences work requiring a *permit* on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the applicable governing authority that shall be in addition to the required *permit* fees.

Exemptions:

1. Earthwork
2. Stakeouts and other necessary planning procedures

Reason:

These exemptions allow for planning and other preliminary procedures that do not consist of the erection of a building to commence as permits and other important paper work are processed. This will also allow builders to install necessary construction Best Management Practices to comply with municipal Stormwater Phase II requirements.

Cost Impact:

No cost impact.

City's Response:

The city may issue a grading permit or a footing/foundation permit prior to the issuance of a building permit. Recommended exemptions are unnecessary.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: Chapter 2: Definitions – Story Above Grade Plane

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

STORY ABOVE GRADE PLANE. Any *story* having its finished floor surface entirely above the *grade plane*, except that a *basement* shall be considered as a *story above grade plane* where the finished surface of the floor above the *basement* meets ~~any one~~ of the following:

1. Is more than 6 feet (1829 mm) *above grade plane*, and
2. Is more than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter, and
3. Is more than 12 feet (3658 mm) above the finished ground level at any point.

Reason:

The 2009 IRC requirements would dramatically effect current building design requirements and put restrictions on three-story homes.

Cost Impact:

This definition will have a significant impact on the cost of construction.

City's Response:

The building division disagrees with this recommendation. This definition, as written, has been in the city's building code since 1992. It gives clear parameters as to when a basement becomes a story above grade plane. If any one of the criteria listed is met, the basement is considered a story above grade plane. As recommended, all 3 criteria have to be met before a basement becomes a story above grade. Per the recommended definition a basement would almost never be considered a story above grade plane.

9.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: Table R 301.2(1) – Note h.

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

Ground Snow Load	Wind Design		Seismic Design Category	Subject to Damage From			Winter Design Temp	Ice Barrier Underlayment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp
	Speed (mph)	Topographic Effect		Weathering	Frost Line Depth	Termite					
					<u>30 Inches</u>			<u>NO</u>			

h. ~~In accordance with Section R905.2.7.1, R905.4.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the~~ The jurisdiction shall fill in this part of the table with "YES." "NO." ~~Otherwise, the jurisdiction shall fill in this part of the table with "NO."~~

Reason:

St. Louis County does not have a climate that would warrant an ice barrier underlayment and the frost depth for the area is 30 inches.

Cost Impact:

Estimated cost savings for this amendment range from \$350 to \$750 depending on the size and design of the home.

City's Response:

The building division agrees that the frost line depth in our area is 30 inches. The building division disagrees that our climate would not warrant an ice barrier underlayment. Ice has formed along roof eaves in this area and the ice barrier helps to prevent damage to the roof sheathing along the edge of the roof.

10.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: *2009 International Residential Code*

Code Section: R301.2.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R301.2.2 Seismic provisions. The seismic provisions of this code shall apply to buildings constructed in Seismic Design Categories C, D₀, D₁ and D₂, as determined in accordance with this section.

Exemption: Detached one- and two-family dwellings located in Seismic Design Category C and D₀ are exempt from the seismic requirements of this code.

Reason:

 **Cost Impact:**

City's Response:

The building division does not believe this change is necessary. St. Louis County has been determined to be in Seismic Design Category C.

11.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R302.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1.

Exceptions:

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the fire separation distance.
2. Walls of dwellings and accessory structures located on the same lot.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.
4. Detached garages accessory to a dwelling located within 2 feet (610 mm) of a lot line are permitted to have roof eave projections not exceeding 4 inches (102 mm).
5. Foundation vents installed in compliance with this code are permitted.
6. Cantilevered manufactured fireplaces.
7. Roof eave overhangs.
8. Uncovered decks.

Reason:

Exception 6 includes a product that poses no serious health or safety risk.

Exception 7 has been added as it is often impossible to predict construction projections within a few inches. Including specific distances for roof eave overhangs is also unnecessary as the constructed exterior wall will be in compliance with the noted distance separations and all portions of the vertical wall above the sheathing are fire rated.

Exception 8 includes a structure that poses no serious health or safety risk.

Cost Impact:

The additions to R302.1 would be a significant cost savings.

12.

City's Response:

The building division does not think this change is needed. The city's zoning code does not allow the walls of dwellings or accessory structures to be located closer than 5 feet to any property line.

13.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R303.3

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.3 m²), one-half of which must be openable.

Exception:

1. The glazed areas shall not be required where artificial light and a mechanical *ventilation* system are provided. The minimum *ventilation* rates shall be 50 cubic feet per minutes (24 L/s) for intermittent *ventilation* or 20 cubic feet per minute (10 L/s) for continuous *ventilation*. *Ventilation* air from the space shall be exhausted directly to the outside or to an attic gable vent or ventilated soffit

Reason:

This code comment is offered to help builders maintain current building practices.

Cost Impact:

City's Response:

The building division disagrees with this recommendation. The intent of the code is to exhaust moisture-laden air directly to the outside through the soffit, through the attic gable vent or through the roof.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: *2009 International Residential Code*

Code Section: R303.4.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R303.4.2 Exhaust openings. Exhaust air shall not be directed below 6 feet and 8 inches onto a public walkway.

Reason:

Keeping exhaust air above 6 feet and 8 inches protects the health and safety of the passerby, while maintaining design flexibility.

Cost Impact:

Addition to the code would save approximately \$400 per exhaust opening.

City's Response:

The building division disagrees with this recommendation. The intent of this code section is to prevent moisture-laden air from bathroom, kitchen or dryer vents from creating a slipping hazard on all walkways, not just public walkways.

15.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: R311.3

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R311.3 Floors and landings at exterior doors. There shall be a landing or floor on each side of at each required egress exterior door. The width of each landing shall not be less than the door served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel. Exterior landings shall be permitted to have a slope not to exceed $\frac{1}{4}$ unit of vertical in 12 units horizontal (2-percent).

Exception: Exterior balconies less than 60 square feet (5.6 m^2) and only accessible from a door are permitted to have a landing less than 36 inches (914 mm) measured in the direction of travel.

Reason:

Landing requirements should only apply toward required egress openings, not all egress doors. This maintains the importance of safety while allowing for a greater freedom with design.

Cost Impact:

The proposed amendment to the code would save approximately \$300 to \$2,000 per home. The cost savings varies with the home's design and number of exterior egress doors.

City's Response:

The building division disagrees with this recommendation. The intent of the building code is to have a landing of the proper size at all exterior doors.

16.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: R311.3.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R311.3.2 Floor elevations for other exterior doors. Doors other than the required egress door shall be provided with landing or floors not more than 7 ¾ inches (196 mm) below the top of the threshold.

Exception: A landing is not required where a stairway of ~~two~~ four or fewer risers is located on the exterior side of the door, provided the door does not swing over the stairway.

Reason:

The change from two to four or fewer risers makes this provision compatible with other requirements regulating conditions for risers outlined in R311.7.7.

Cost Impact:

City's Response:

The building division disagrees with this recommendation. The code does not want a resident to walk out through their exterior door directly onto a stairway that has more than 2 risers. Section R311.7.7 has nothing to do with stairways in proximity to exterior doors. It requires handrails to be provided on at least one side of stairways with 4 or more risers.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: R311.7.4

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R311.7.4 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section all dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.

R311.7.4.1 Riser height. The maximum riser height shall be $7\frac{3}{4}$ 8 $\frac{1}{4}$ inches (196 228.6 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than $\frac{3}{8}$ inch (9.5 mm).

R311.7.4.2 Tread depth. The minimum tread depth shall be 10 $\frac{1}{2}$ inches (254 228.6 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than $\frac{3}{8}$ inch (9.5 mm). Consistently shaped winders at the walkline shall be allowed within the same flight of stairs as rectangular treads and do not have to be within $\frac{3}{8}$ inch (9.5 mm) of the rectangular tread depth.

Winder treads shall have minimum depth of 10 $\frac{1}{2}$ inches (254 228.6 mm) measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point within the clear width of the stair. Within any flight of stairs, the largest winder tread depth at the walkline shall not exceed the smallest winder tread by more than $\frac{3}{8}$ inch (9.5 mm).

Reason:

The purpose of this amendment is to retain the stair geometry requirements to those that have historically been allowed under the Building Officials and Code Administrators National Building Code (BOCA). This amendment will allow for the continued use of the $8\frac{1}{4}$ " x 9" geometry, which is also the historically accepted requirement of many other state and local jurisdictions across the country. Many others actually adopt stair geometry requirements of $8\frac{1}{4}$ " x 9."

These dimensions, originally accepted in the First Draft of the International Residential Code (IRC) and the historic dimensions in the Council of American Building Officials' CABO One- and Two-family Building Code, adequately provide for stair safety in residential occupancies.

The 8 1/4" x 9" geometry has always adequately provided for occupant safety in residential occupancies. No sound documentation or data has ever been presented demonstrating that the 8 1/4" x 9" geometry is any less safe than a stair geometry of 7 3/4" x 10" or other even more stringent geometries. More specifically, there is no sound data showing or otherwise indicating a stair geometry of 8 1/4" x 9" is a contributing factor in accidental residential falls anymore than a stair geometry of 7 3/4" x 10" or any other stair geometry that has been proposed.

The safety benefits of the 7 3/4" riser and 10" tread stair geometry are technically unsubstantiated and are not practical in many home designs. If the footprint of the house must be increased to accommodate the additional space needed for 7 3/4" x 10" vs. an 8 1/4" x 9" geometry, adequately sized living spaces are sacrificed without any demonstrated gain. This can lead to an economic hardship upon first-time homebuyers of smaller homes, and in particular for construction on smaller lots, in-fill projects, and townhomes.

As outlined in Section R101.3 of the IRC, the purpose the requirements in the code are to provide minimum requirements for occupant safety and health. There is adequate substantiation to show that 8 1/4" x 9" geometry provides this minimum level of occupant safety.

Cost Impact:

Revisions would have a potential cost savings of approximately \$100 to \$350 per home (varies with style, design and number of stair cases).

City's Response:

The 7 3/4" maximum riser height / 10" minimum tread width stair geometry has been part of the BOCA National Building Code since 1996, the International Residential Building Code since 2000 and the city's building code since 2/2002. It has been demonstrated by various studies and code-change committees that the less steep 7 3/4" / 10" stair geometry provides for a safer stair and an easier stair to ascend and descend than a stair with the 8 1/4" / 9" stair geometry. This is an important factor as our society gets older. The building division believes these recommendations should not be included in the city's new building code.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: R311.7.5 Landings for Stairways

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R311.7.5 Landings for stairways. There shall be a floor or landing at the top and bottom of each stairway.

Exception: A floor or landing is not required at the top of an interior or exterior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs. A flight of stairs shall not have a vertical rise larger than 12 feet (3658 mm) between floor levels or landings. The width of each landing shall not be less than the width of the stairway served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel.

Reason:

Direction of travel does not require a landing to safely open a door.

Cost Impact:

Proposed code amendment would save approximately \$918.75 to \$1,225 per home (cost varies with the price of the landing and value of home per square foot.)

City's Response:

The building division does not believe this recommendation is necessary. There are other code sections (R311.3 through R311.3.2) that regulate landings at exterior doors. Also, there is code language in the exception that appears to have been moved from the body of Section R311.7.5 for no apparent reason.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R 313.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R 313.2 One- and two-family dwellings automatic fire systems. ~~Effective January 1, 2011, an automatic residential fire sprinkler system shall be installed in one- and two-family dwellings. A builder of a single family dwellings or residences or multi-unit dwellings of four or fewer units shall offer to any purchaser on or before the time of entering into the purchase contract the option, at the purchaser's cost, to install or equip fire sprinklers in the dwelling, residence, or unit. Notwithstanding any other provision of law to the contrary, no purchaser of such a single family dwelling, residence, or multi-unit dwelling shall be denied the right to choose or decline to install a fire sprinkler system in such dwelling or residence being purchased by any code, ordinance, rule, regulation, order, or resolution by any county or other political subdivision. Any county or other political subdivision shall provide in any such code, ordinance, rule, regulation, order, or resolution the mandatory option for purchasers to have the right to choose and the requirement that builders offer to purchasers the option to purchase fire sprinklers in connection with the purchase of any single family dwelling, residence, or multi-unit dwelling of four or fewer units.~~

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.

Reason:

Amendment above brings St. Louis County Building Code into compliance with the Missouri's Revised Statutes.

Cost Impact:

Estimated cost savings range from \$9,688.81 to \$22,725.42.

City's Response:

The city attorney has reviewed and approved the city's proposed amending language to this section and determined it to be in compliance with state law.

21.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: *2009 International Residential Code*

Code Section: R403.1.4

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R403.1.4.1 Frost Protection. Except where otherwise protected from frost, foundation walls, piers, and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. ~~Extended below the frost line specified in Table R301.2.(1)~~ Extend 30 inches below finish grade;
2. Constructing in accordance with Section R403.3;
3. Constructing in accordance with ASCE 32; or
4. Erected on solid rock.

 **Reason:**

City's Response:

The 30 inch depth is already specified in Table R301.2.(1).

Cost Impact:

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R404 Tables

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R404.1.1 (1) Concrete Foundation Walls

Max. Wall Height	Max. Depth of Unbalanced Backfill	Min. Nominal Wall Thickness
7'-0"	6'-0" or less 7'-0"	8" 10" Note a
8'-0"	6'-0 or less 7'-0" 8'-0"	8" Note a 8" Note a 8" Note a
9'-0"	6'-0" or less 7'-0" 8'-0" 9'-0"	10" 10" 10" Note b 10" Note b
10'-0"	9'-0"	12" Note c

Note a: Concrete foundation walls may be constructed a minimum of nominal 8" thick where the wall height from the top of the footing to the top of the wall does not exceed 8'. A minimum of (2) #4 reinforcing bars shall be placed horizontally in top and bottom of the foundation wall. A minimum of (2) #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24" beyond the corners of the openings.

Note b: Concrete foundation walls may be constructed a minimum of nominal 10" thick. A minimum of (2) #5 reinforcing bars shall be placed horizontally in the top, middle, and bottom of the foundation wall. A minimum of (2) #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24" beyond the corners of the openings.

Note c: Concrete foundation walls may be constructed a minimum of nominal 12" thick. A minimum of (3) #5 reinforcing bars shall be placed horizontally in the top, middle, and bottom of the foundation wall. A minimum of (2) #5 reinforcing barts shall be provided around all window and door openings in

concrete foundation and basement walls; bars shall extend a minimum of 24" beyond the corners of the openings.

The concrete minimum nominal wall thickness shall be 8 inches for foundation walls in soil classes SC, MH, ML-MC and inorganic CL when the maximum wall height is 8 feet.

The concrete minimum wall thickness shall be 10 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when the maximum wall height is 9 feet.

The concrete minimum wall thickness shall be 12 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when the maximum wall height is 10 feet.

Reason:

Richard W. Stephenson, P.E. Ph.D. stated on a study vetted during the 2003 code cycle (copy available), "there are no stability problems with nominally 8-inch thick foundation walls for residential construction. Consequentially, there is no compelling justification to require 10-inch foundation walls. Similarly, current reinforcements for steel reinforcement are adequate." The same conditions exist today and, therefore, this proposal allows for current construction practices to continue.

Cost Impact:

Proposed code changes would yield a potential cost savings of \$1,200 to \$4,000 depending on the size of the foundation.

City's Response:

The building division believes this recommendation is unnecessary. Table R404.1.2(1) through Table 404.1.2(8) more than adequately regulate the construction of concrete foundation walls.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: R405.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

405.1 Concrete or masonry foundations. Drains shall be provided around all concrete or masonry foundation that retain earth and enclose habitable or usable space located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper, and the drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51 mm) of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material.

Exceptions:

1. A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group 1 Soils, as detailed in Table R405.1.
2. Drains provided as detailed in Section R405.1.2 are approved as an alternative method to meet the requirements of this Section.

R405.1.2 Soil Evaluations. An evaluation of the soil for the presence or absence of ground water is required. The evaluation report shall be based on either a subsurface soil investigation or satisfactory data from adjacent areas together with an inspection of the excavation prior to pouring concrete.

R405.1.2.1 Groundwater present. Provide drain tile, perforated pipe, or other approved foundation drainage systems (such as water channel system) around perimeter of the outside of the foundation and inside the foundation. Drain discharge shall be by gravity to daylight or be connected to a basement floor sump.

R405.1.2.2 No ground water present. Provide drain tile, perforated pipe, or other approved foundation drainage systems (such as water channel system) around

perimeter of the outside of the foundation or inside the foundation. Drain discharge shall be by gravity to daylight or be connected to a basement floor sump.

R405.1.2.3 Filter membranes. An approved filter membrane shall be placed over the top of the joints/pipe perforations. The tile/pipe shall be placed on 2" minimum gravel or crushed stone and have 6" minimum cover.

R405.1.2.4 Drainage system. Drainage system shall discharge by gravity to daylight or be connected to an approved sump (15" in diameter x 18" deep with fitted cover). A sump pump shall be provided if basement is finished or partially finished with pump discharge by an approved method.

Reason:

The proposed code change has been an alternative used in the past that is an effective draining method for foundations.

Cost Impact:

The proposed code change will save approximately \$300 to \$400 per home.

City's Response:

The city's amending language in the proposed adopting ordinance has similar requirements organized in a different manner.

26.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R502.2.2.3

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R502.2.2.3 Deck lateral load connection. The lateral load connection required by Section R502.2.2 shall be permitted to be in accordance with Figure R502.2.2.3. Hold-down tension devices shall be installed in not less than two locations per deck, and each device shall have an allowable stress design capacity of not less than 1500 pounds (6672N).

Exception: All decks that are 100 square feet or less.

Reason:

Decks that are less than 100 square feet do not need the extra support required in the code as published. This requirement exempts the new stringency for the decks that do not require it and maintains the new safety allowance for the decks that might need the additional support.

Cost Impact:

The proposed code amendment would save approximately \$180. It costs \$90 per device (two required per deck); price includes \$25 for materials and \$65 for additional hour of labor for installation of each device.

City's Response:

The building division believes there is no substantiated basis for this recommendation (exception) to be included in the city's new building code.

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R602.3

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R602.3 Design and construction. Exterior walls of wood-frame construction shall be designed and constructed in accordance with the provisions of this chapter and Figures R602.3(1) and R602.3(2) or in accordance with AF&PA's NDS. Components of exterior walls shall be fastened in accordance with Tables R602.3(1) through R602.3(4). Structural wall sheathing shall be fastened directly to structural framing members. Exterior wall coverings shall be capable of resisting the wind pressures listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(2) adjusted for height and exposure using Table R301.2(3). Wood structural panel sheathing used for exterior wall shall conform to the requirement of Table R602.3(3).

Studs shall be continuous from support at the sole plate to a support at the top plate to resist loads perpendicular to the wall. The support shall be a foundation on floor, ceiling or roof diaphragm or shall be designed in accordance with accepted engineering practice.

Exceptions:

1. Jack studs, trimmer studs and cripple studs at openings in walls that comply with Tables R502.5(1) and R502.5(2).
2. Headers can be on top of an opening in a wall.

Reason:

Provides increased shear properties and avoids "hinged" lateral complications with no adverse structural effects. This change serves to clarify the approval of this detail as there have been interpretations denying such configurations in the past. The code change also conforms to standard construction practices and helps to facilitate shear wall calculations.

Cost Impact:

Estimated cost savings are minimal.

City's Response:

The building division believes this recommendation is unnecessary. Figure R602.3(2) and Tables R502.5(1) and R502.5(2) allow headers across the top of openings in exterior walls.

28.

**City of Creve Coeur
Code Change Proposal Form**

Code: 2009 International Residential Code

Code Section: R602.10.1.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R602.10.1.1 Braced wall panels. Braced wall panels shall be constructed in accordance with the intermittent bracing methods specified in Section R602.10.2, or the continuous sheathing methods specified in Sections R602.10.4, [and] R602.10.5, and R602.10.10. With the exception of the bracing method detailed in Section R602.10.10 [M] mixing of bracing method shall be permitted as follows:

1. Mixing bracing methods from story to story is permitted.
2. Mixing bracing methods from braced wall line to braced wall line within a story is permitted, except that continuous sheathing methods shall conform to the additional requirements of Sections R602.10.4 and R602.10.5.
3. Mixing bracing methods within a braced wall line is permitted only in Seismic Design Categories A and B, and detached dwellings in Seismic Design Category C. The length of required bracing for the braced wall line with mixed sheathing types shall have the higher bracing length requirement, in accordance with Tables R602.10.1.2(1) and R602.10.1.2(2), of all types of bracing used.

R602.10.1.2 Length of bracing. The length of bracing along each braced wall line shall be the greater of that required by the design wind speed and braced wall line spacing in accordance with Table R602.10.1.2(1) as adjusted by the factors in the footnotes or the Seismic Design Category and braced wall line length in accordance with Table R602.10.1.2(2) as adjusted by the factors in Table R602.10.1.2(3) or braced wall panel location requirements of Section R602.10.1.4. Only walls that are parallel to the braced wall line shall be counted toward the bracing requirement of that line, except angled walls shall be counted in accordance with Section R602.10.1.3. In no case shall the minimum total length of bracing in a braced wall line, after all adjustments have been taken, be less than 48 inches (1219 mm) total.

Exception: Structures braced using Section R602.10.10.

R602.10.10 Simplified bracing method for one- and two-family dwellings when the entire structure is sheathed with wood structural panels and located in wind exposure A or B. The construction documents shall detail the locations and widths of all braced wall panels in accordance with this section.

R602.10.10.1 Wood structural sheathing. The building exterior walls shall be sheathed with 7/16 inch (11.1 mm) or thicker plywood or OSB wood structural panels. The wood structural panels shall be applied to all exterior walls, gable ends, and band boards. All vertical joints between panels shall be blocked. Horizontal joints in braced wall panels shall be blocked.

R602.10.10.2 Braced wall panel locations. Braced wall panels shall be located in every exterior braced wall line in accordance with the following criteria:

1. The outside edge of the first braced wall panel meeting the width established in Table R602.10.10.3 shall be a maximum of 12.5 feet (3810 mm) or less from each end of the braced wall line. The outside stud of the first braced wall panels closest to the end of the braced wall line shall be secured with a hold-down device securing the end stud to the foundation with a minimum uplift design value of 800 pounds.

Exception: The 800 pound hold-down device is not required when the braced wall panel is placed at the end of the braced wall line and there is a 24 inch (610) wide full height sheathed wall placed 90 degrees to the end of the braced wall line and panel.

2. The centerline spacing of braced wall panels in a braced wall line may not exceed 25 feet (7620 mm).

R602.10.10.3 Braced wall panel widths. Braced wall panel locations shall be shown on the floor plans or the elevation views and meet the widths established in Table R602.10.10.3.

**TABLE 602.10.10.3
SIMPLIFIED BRACING PANEL WIDTHS**

		WIDTH OF SOLID PANEL ^{a, b}			
		8' wall height	9' wall height	10' wall height	12' wall height
Plywood/OSB Panel	3:1	32"	36"	40"	48"
Simplified Portal Wall ^c	6:1	16" ^d	18" ^d	20" ^d	24" ^d

a. Linear interpolation is permitted.

b. Wall height is the vertical distance from the bottom of the sole/sill plate to the top of the double top plate. An additional 2 inch (50.8 mm) variation in height is allowed for pre-cut stud framing.

c. The Simplified Portal Wall, if applicable, shall be constructed in accordance with the applicable detail in Figure R602.10.10.3. The designer shall provide this detail on the construction documents.

d. The Simplified Portal Wall width assumes the beam is placed under the top plate of the wall. A smaller width may be calculated for a lower top of beam height using the 6:1 height to width ratio.

R602.10.10.4 Corner framing. The exterior wall corners shall be constructed in accordance with the applicable detail in Figure R602.10.10.4.

Exception: Braced wall panels located in accordance with Section R602.10.10.2.

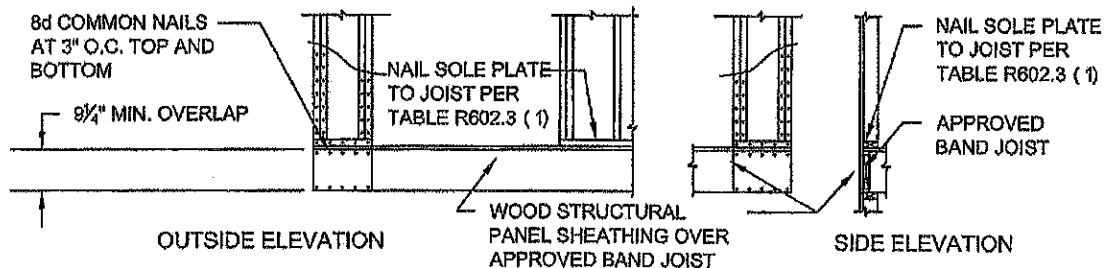
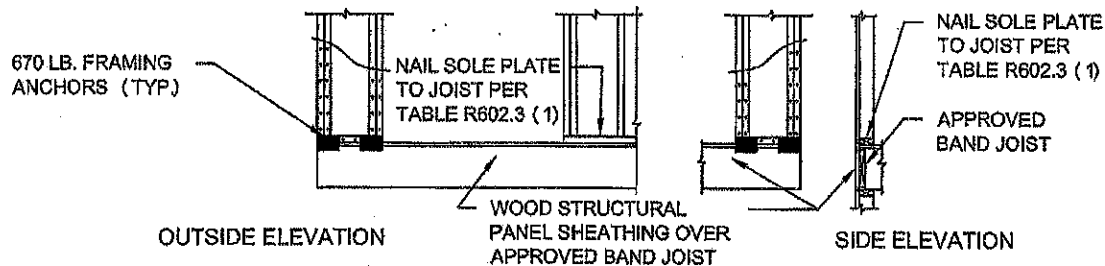
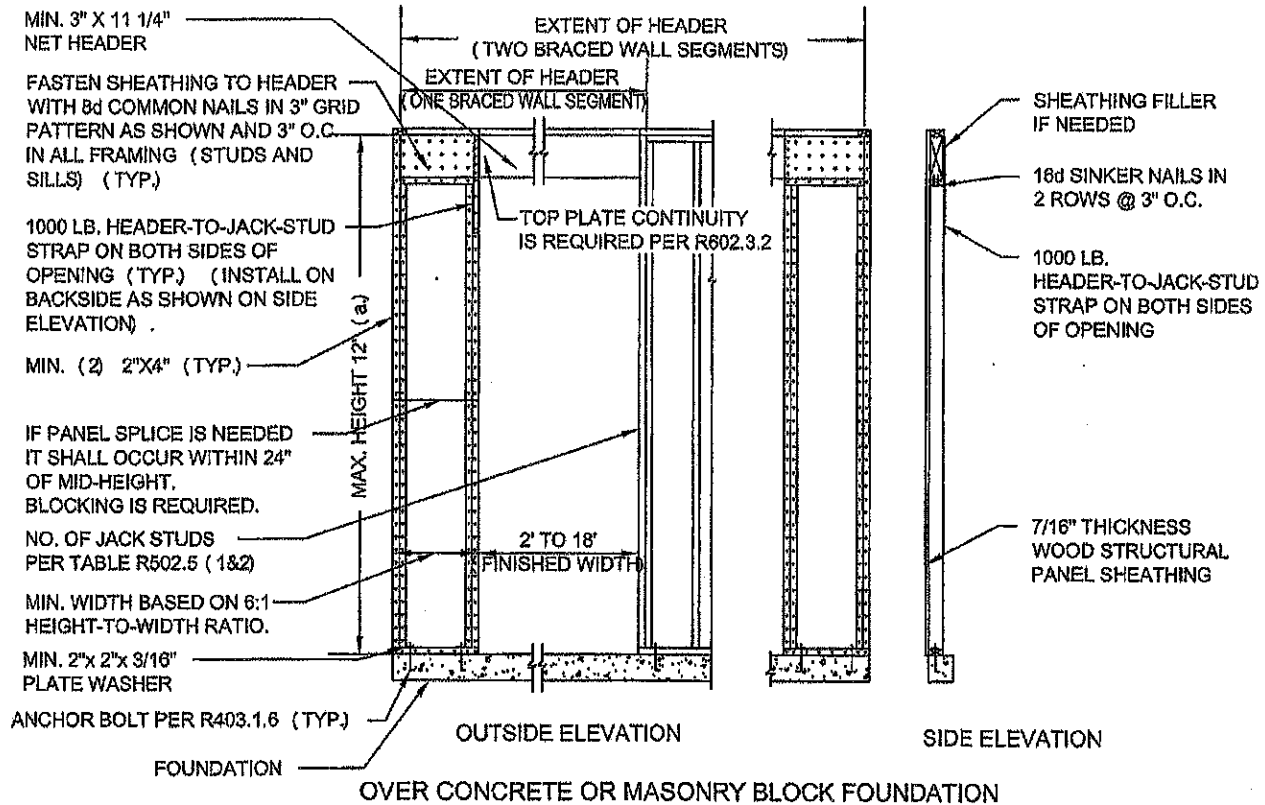
R602.10.10.5 Braced wall line spacing. When the perpendicular distance between the exterior braced wall lines exceeds 50 feet (15240 mm), the registered design professional shall include the following certification on the drawings:

30.

The interior and exterior wall configuration braces the structure in accordance with or equivalent to the lateral bracing provisions of Section R602.10 of the International Residential Code, 2009 edition or Section 2305 of the International Building Code, 2009 edition.

R602.10.10.6 Maximum wall height. Wall height may not exceed 12 feet (3658 mm) (12 feet 2 inches (3708 mm) actual). Walls greater than 12 feet (3658 mm) in height shall be designed and detailed by the registered design professional to resist wind loads in both the longitudinal and transverse directions.

31.



OVER RAISED WOOD FLOOR OR SECOND FLOOR
WOOD STRUCTURAL PANEL OVERLAP OPTION

FIGURE R602.10.10.3
SIMPLIFIED PORTAL WALL

- a. CRIPPLE WALL FRAMING CONSISTING OF STUD FRAMING, SINGLE BOTTOM PLATE, AND DOUBLE TOP PLATE MAY BE ADDED TO THE TOP OF THE NARROW PORTAL WALL AS LONG AS THE COMBINED HEIGHT OF THE TWO WALLS IS LESS THAN OR EQUAL TO 12 FEET AND THE TWO WALLS ARE STRAPPED TOGETHER ON THE INTERIOR SIDE WITH A 18GAUGE METAL 1 1/2 INCH WIDE BY 21 INCH LONG STRAP. A MINIMUM 10 INCHES OF THE STRAP SHALL BE CONNECTED TO EACH WALL OR GABLE TRUSS WITH 9 - 16D NAILS FOR A TOTAL OF 18-16D NAILS IN THE ENTIRE STRAP. STRAPS SHALL BE LOCATED AT EACH END OF THE CONNECTED WALLS OR WALL AND GABLE TRUSS WHERE SPACE ALLOWS FOR THE 10 INCH LENGTH OF STRAP. THE SPACING BETWEEN THE STRAPS MAY NOT EXCEED 4 FEET ON CENTER. THE STRAPS SHALL NOT BE BENT HORIZONTALLY TO ACCOMMODATE WOOD FRAMING. IF APPLICABLE, NAILERS SHALL BE ADDED TO ONE OF THE WALLS OR GABLE END USING A MINIMUM OF 9-16D NAILS TO CREATE THE VERTICAL PLANE NEEDED TO MOUNT THE STRAP.

MINIMUM 24" WIDE FULL HEIGHT
7/16" WOOD STRUCTURAL PANEL
8d NAIL AT 6" O.C. ON ALL
FRAMING MEMBERS AT PANEL EDGES
AND 12" O.C. ON ALL FRAMING
MEMBERS NOT AT PANEL EDGES

2-16d NAILS AT 24" O.C.

8d NAIL AT 6" O.C.
(ALL PANEL EDGES)

GYPSUM WALL BOARD INSTALLED IN
ACCORDANCE WITH TABLE R602.3(1)

WOOD STRUCTURAL
PANEL INSTALLED IN
ACCORDANCE WITH
TABLE 602.10.10.3

8d NAIL AT 12" O.C. ON ALL
FRAMING MEMBERS NOT AT PANEL EDGES

OUTSIDE CORNER DETAIL

GYPSUM WALL BOARD INSTALLED IN
ACCORDANCE WITH TABLE R602.3(1)

2-16d NAILS AT 24" O.C.

WOOD STRUCTURAL
PANEL INSTALLED IN
ACCORDANCE WITH
TABLE 602.10.10.3

MINIMUM 24" WIDE FULL HEIGHT 7/16" WOOD
STRUCTURAL PANEL 8d NAIL AT 6" O.C.
ON ALL FRAMING MEMBERS AT PANEL EDGES
AND 12" O.C. ON ALL FRAMING MEMBERS NOT
AT PANEL EDGES

INSIDE CORNER DETAIL

MINIMUM 24" WIDE FULL
HEIGHT 7/16" WOOD
STRUCTURAL PANEL

8d NAIL AT 6" O.C. IN ALL
PANEL EDGES AND 12" O.C.
ON ALL FRAMING MEMBERS
NOT AT PANEL EDGES THAT
IS NOT PART OF PORTAL FRAME

(2) 16d NAILS AT 24" O.C.

FRAMING BOARD FOR GYPSUM
WALL BOARD (OPTIONAL), THIS
STUD MAY BE ROTATED 90°

SIMPLIFIED PORTAL FRAME
WALL SEE FIGURE R602.10.10(3)

CORNER DETAIL

USED IN CONJUNCTION WITH SIMPLIFIED PORTAL WALL

FIGURE R602.10.10.4
SIMPLIFIED BRACING EXTERIOR CORNER FRAMING

- a. END STUD INDICATED ON THE ABOVE DETAILS MAY BE SHIFTED 7/16" TO ALLOW STUD FACE TO BE ALIGNED WITH SHEATHING, OR AN OPTIONAL NON-STRUCTURAL FILLER PANEL MAY BE USED.

33.



City's response:

The building division believes these recommendations are unnecessary. Sections R602.10 through R602.10.9.2, as written, more than adequately address wall bracing. Also, Section R301.1.3 Engineered Design, allows another wall bracing option if the prescriptive requirements in Sections R602.10 through R602.10.9.2 cannot be met.

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R602.10.3.3

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R602.10.3.3 Method PFH: Portal frame with hold-downs. Method PFH *braced wall panels* constructed in accordance with one of the following provisions are also permitted to replace each 4 feet (1219 mm) of *braced wall panel* as required by Section R602.10.3 for use adjacent to a window or door opening with a full-length header:

1. Each panel shall be fabricated in accordance with Figure R602.10.3.3. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure R602.10.3.3. A spacer, if used with a built-up header, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. One anchor bolt not less than $\frac{5}{8}$ ½ inch-diameter (16 12.7 mm) and installed in accordance with Section R403.1.6 shall be provided in the center of each sill plate. The hold-down devices shall be embedded-strap type, installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation which is continuous across the entire length of the braced wall line. The foundation shall be reinforced as shown on Figure R602.10.3.2. The reinforcement shall be lapped not less than 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.
2. In the first *story* of the two-story buildings, each wall panel shall be braced in accordance with item one above, except that each panel shall have a length of not less than 24 inches (610 mm).

Exception: The minimum width of a portal frame in the first story of a two-story building may be approved if it is constructed at a 1:6 ratio and the maximum height of a structure may extend to 12 feet (3657.6 mm).

Reason:

This addition is a standard building practice and accepting this exception would allow for this method to continue.

Cost Impact:

35.



City's Response:

The building division believes this exception is unnecessary. Sections R602.10.3.3 through R602.10.4.1.1, as written, adequately address portal frame construction. Section R301.1.3 Engineered Design, also gives another option if the prescriptive requirements of the sections noted above cannot be met.

36.

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R612.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

~~**R612.2 Window sills.** In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4-inch (102 mm) diameter sphere where such openings are located within 24 inches (610 mm) of the finished floor.~~

~~Exceptions:~~

- ~~1. Windows whose openings will not allow a 4-inch diameter (102 mm) sphere to pass through the opening when the opening is in its largest position.~~
- ~~2. Openings that are provided with window fall prevention devices that comply with Section R612.3.~~
- ~~3. Openings that are provided with fall prevention devices that comply with ASTM 2090.~~
- ~~4. Windows that are provided with opening limiting devices that comply with Section R612.4.~~

~~**R612.3 Window fall prevention devices.** Window fall prevention devices and window guards, where provided, shall comply with requirements~~

~~**R612.4 Window opening limiting devices.** When required elsewhere in this code, window opening limited devices shall comply with the provisions of this section.~~

~~**R612.4.1 General requirements.** Window opening limiting devices shall be self acting and shall be positioned so as to prohibit the free passage of a 4.0-in. (102 mm) diameter rigid sphere through the window opening when the window opening limiting device is installed in accordance with the manufacturer's instructions.~~

~~**R612.4.2 Operation for emergency escape.** Window opening limiting devices shall be designed with release mechanisms to allow for emergency escape through the window opening without the need for keys, tools or special knowledge. Window opening limiting devices shall comply with all of the following:~~

1. ~~Release of the window opening limiting device shall require no more than 15 pounds (66 N) of force.~~
2. ~~The window opening limiting device release mechanism shall operate properly n all types of weather.~~
3. ~~Window opening limiting devices shall have their release mechanisms clearly identified for proper use in an emergency.~~
4. ~~The window opening limiting device shall not reduce the minimum net clear opening area of the window unit below what is required by Section R310.1.1 of the code.~~

Reason:

This amendment is offered as the proposed language conflicts with egress requirements. Additionally, these requirements will not allow for double hung windows and other features requested by potential home owners.

Cost Impact:

The proposed amendment offers minimal cost savings.

City's Response:

The building division disagrees with this recommendation that these sections be deleted in their entirety. The intent of these provisions is to prevent small children from falling out of open windows with sills located more than 6 feet above grade that have a sill height of less than 24 inches from the finished floor. These provisions do not prohibit double-hung windows and they do not conflict with emergency escape and rescue opening requirements.

38.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: *2009 International Residential Code*

Code Section: R903.5

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

~~R903.5 Section R903.5 Hail Exposure.~~ ~~Hail exposure, as specified in Sections 903.5.1 and R903.5.2, shall be determined using figure R903.5.~~

~~R903.5.1 Moderate Hail Exposure.~~ ~~One or more hail days with hail diameters larger than 1.5 inches (38mm) in a 20-year period.~~

~~R903.5.2 Severe Hail Exposure.~~ ~~One or more hail days with hail diameters larger than or equal to 2.0 inches (51mm) in a 20-year period."~~

Reason:

Amendment offered as these requirements are unnecessary in the St. Louis area.

 **Cost Impact:**

City's Response:

The building Division believes this recommendation is unnecessary. The map in Figure R903.5 shows this area as having no moderate or severe exposure.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R905.2.8.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R905.2.8.2 Valleys. Valley linings shall be installed in accordance with the manufacturer's installation instructions before applying shingles. Valley linings of the following types shall be permitted:

1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be at least 24 inches (610 mm) wide and of any of the corrosion-resistant metals in table R905.2.8.2.
2. For open valleys, valley lining of two plies of mineral surfaced roll roofing, complying with ASTM D 3909 or ASTM D 6380 Class M, shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer a minimum of 36 inches (914 mm) wide.
3. For closed valleys (valley covered with shingles), valley lining of ~~one~~ two ply of ~~smooth roll roofing 15 pound felt~~ complying with ~~ASTM D 6380 and at least 36 inches wide (914 mm)~~ ASTM D 226 Type I, ASTM D 4869 Type I, or ASTM D 6757 or valley lining as described in Items 1 and 2 above shall be permitted. Self adhering polymer modified bitumen underlayment complying with ASTM D 1970 shall be permitted in lieu of the lining material.

Reason:

This amendment is proposed as it maintains the existing construction practices and preserves the esthetic integrity of the roof.

Cost Impact:

Estimated cost impacts are minimal.

City's Response:

The building division disagrees with this recommendation. This section, as written, requires a heavier roofing material for the valley lining. This lining is installed under the roof shingles and will have no aesthetic impact on a roof.

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**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: *2009 International Residential Code*

Code Section: R1006.1.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R1006.1.1 Factory-built fireplaces. Exterior combustion air ducts for factory-built fireplaces shall be a listed component of the fireplace or equivalent and shall be installed according to the fireplace manufacturer's instructions.

Reason:

The proposed amendment provides purchasers options but maintains that all fire place duct work is properly suited and installed.

Cost Impact:

Estimated cost impact is minimal.

 City's Response:

The building division disagrees with this recommendation. The 'listed component' requirement ensures the air duct is compatible with the fireplace. 'Or equivalent' is vague language that would be difficult to enforce.

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R1006.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

R1006.2 Exterior air intake. The exterior air intake on masonry fireplaces shall be capable of supplying ~~all~~ *combustion air* from the exterior of the *dwelling* or from spaces within the *dwelling* ventilated with outside air such as non-mechanically ventilated crawl or attic spaces. The exterior air intake shall not be located within the garage or *basement* of the *dwelling* nor shall the air intake be located at an elevation higher than the firebox. The exterior air intake shall be covered with a corrosion-resistant screen of ¼ inch (6 mm) mesh.

Reason:

The amendment was proposed to provide clarification.

Cost Impact:

No cost impact.

City's Response:

The building division disagrees with this recommendation. The intent of the code is that exterior air (for combustion) be provided for both factory-built and masonry fireplaces. See Section R1006.1.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: N1101.9

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

N1101.9 Certificate. ~~A permanent certificate shall be posted on or near in the electrical distribution panel. The certificate shall not cover or obstruct the visibility of the circuit directory label, or service disconnect label or other required labels. The certificate shall be completed by the builder or registered design professional. The certificate shall list the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, crawlspace wall and/or floor) and ducts outside conditioned spaces; U-factors for fenestration; and the solar heat gain coefficient (SHGC) of fenestration. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types of efficiencies of heating, cooling, and service water heating equipment. Where a gas-fired unvented room heater, electric furnace and/or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired unvented room heater," electric furnace" or "baseboard electric heater," as appropriate. An efficiency shall not be listed for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.~~

Reason:

Information is already available on each product installed. If not, labels can be added as appropriate. There is also a concern over the details of the permanent certificate. How is permanence defined and assured? Who certifies the structure?

Cost Impact:

Approximate cost savings by deleting this portion of the code \$200.

City's Response:

The building division disagrees with this recommendation. This section is intended to increase the consumer's awareness of the energy efficiency ratings for various building elements in their home. The buyer can quickly determine that the home complies with the

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energy conservation code. If this section is deleted, the same section would need to be deleted from the adopting ordinance for the 2009 IECC.

44.

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: Table N1102.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows: Table 1102.1 Insulation and Fenestration Requirements by Component

Climate Zone	Fenestration U-Factor	Skylight U-Factor	Glazed Fenestration SHGC	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall Value	Slab R-Value and Depth	Crawl Space Wall R-Value
1	1.2	0.75	0.35	30	13	3/4	13	0	0	0
2	0.65	0.75	0.35	30	13	4/6	13	0	0	0
3	0.5	0.65	0.35	30	13	5/8	19	5/13 0	0	5/13 0
4 except Marine	0.35-0.40	0.60	NR	38 30	13	5/10	19	10/13 0	10, 2 ft	10/13 0
5 and Marine 4	0.35	0.60	NR	38	20 or 13 + 5 ^h	13/17	30 ^f	10/13	10, 2 ft	10/13
6	0.35	0.60	NR	49	20 or 13 + 5 ^h	15/19	30 ^g	10/13	10, 4 ft	10/13
7 and 8	0.35	0.60	NR	49	21	19/21	30 ^g	10/13	10, 4 ft	10/13

- R-values are minimums. U-factors and solar heat gain coefficient (SHGC) are maximums. R-19 batts compressed into nominal 2x6 framing cavity such that the R-value is reduced by R-1 or more shall be marked with the compressed batt R-value in addition to the full thickness R-value.
- The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- The first R-value applies to continuous insulation, the second to framing cavity insulation; either insulation meets the requirement.
- R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less, in zones 1 through 3 for heated slabs.
- There are not SHGC requirements in the Marine Zone.
- Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.2 or Table N1101.2.
- Or insulation sufficient to fill the framing cavity, R-19 minimum.
- "13+5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25% or less of the exterior, R05 sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25" Of the exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.

- i. For impact-related fenestration complying with Section R301.2.1.2, the maximum U-factor shall be 0.75 in zone 2 and 0.65 in zone 3.
- j. For impact-resistant fenestration complying with Section R301.2.1.2 of the International Residential Code, the maximum SHGC shall be 0.40.
- k. The second R-value applies when more than half of the insulation is on the interior.
- l. Exception: Unfinished basements may have up to a maximum of 20% of the total basement wall area exposed above the outside finished grade/ground level as un-insulated concrete foundation walls. The foundation wall area above the outside finished grade/ground level that may be un-insulated is determined by the formula .20 times the basement wall height of all walls (including insulated exterior frame walls for walkout basements and walls common to both basement and attached garages) times the perimeter of these basement walls. In unfinished areas the basement foundation wall insulation shall extend down to the basement floor slab or to a minimum of 24 inches below outside finished grade when the grade is above the floor slab elevation.

Reason:

Requiring excessive insulation will lead to a number of health and safety issues for consumers living in the dwelling for years to come, especially when mandated, as a poorly constructed but tight thermal envelope can lead to mold and other toxins in the dwelling. The changes in this table allow for efficiency concerns to be more than adequately addressed while still allowing for the appropriate amount of ventilation in the dwelling to protect consumer health. Generally, except for two of the changes, the revised table above echoes the provisions of the 2006 IRC and adds footnote "1" that is from the current St. Louis County Building Code Ordinance (N1102.1 "Thermal Performance Criteria – Minimum R-Values").

Cost Impact:

The proposed amendments to the table would save approximately \$500 to \$1,200 per home (cost will vary with size and design of the home).

City's Response:

The building division disagrees with this recommendation. The lower Fenestration U-Factor and higher R values for ceilings, basement and crawl space walls will result in higher energy conservation and lower energy costs for residents of new homes and room additions in Creve Coeur (Climate Zone 4). The building division is unaware of any studies or other evidence substantiating the "mold and other toxins" concern. The deletion of these requirements would also have to be made to the adopting ordinance for the 2009 IECC.

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Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: N1102.2.3

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

N1102.2.3 Access hatches and doors. Access doors from *conditioned spaces* to unconditioned spaces (e.g., attics and crawl) spaces shall be ~~weather-stripped and~~ insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all *equipment* which prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the *attic* access is opened and to provide the permanent means of maintaining the installed R-value of the loose fill insulation.

Reason:

Requiring weather access doors be weather stripped will create technical problems and impede door function. Insulation should provide adequate protection to meet regulation's intent.

 Cost Impact:

Approximate cost savings from proposed code change \$235.

City's Response:

The building division disagrees with this recommendation. The portion of a ceiling used for an attic access door is a weak part of the thermal envelope. Insulating and weather stripping the attic access door will prevent loss of energy through this opening. Deletion of the weather stripping would also need to be made to the adopting ordinance of the 2009 IECC.

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**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: N1102.4.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

N1102.4.1 Building thermal envelope.—The building thermal envelope shall be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. The following shall be caulked, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material.

- ~~1. All joints, seams and penetrations.~~
- ~~2. Site-built windows, doors and skylights.~~
- ~~3.~~ 1. Openings between window and door assemblies and their respective jambs and framing.
- ~~4.~~ 2. Utility penetrations.
- ~~5. Dropped ceilings or chases adjacent to the thermal envelope.~~
- ~~6. Knee walls.~~
- ~~7.~~ 3. Walls and ceilings separating the garage from conditioned spaces.
- ~~8.~~ 4. Behind tubs and showers on exterior walls.
- ~~9.~~ 5. Common walls between dwelling units.
- ~~10. Attic access openings.~~
- ~~11.~~ 6. Rim joists junction.
- ~~12.~~ 7. Other sources of infiltration.

Reason:

There is great concern that enforcing these requirements and results not always anticipated by the code. Results include mold and other hazardous toxins which may later cause serious health problems for the dwelling's occupants. Therefore out of concern for the health and well being of the future occupant, it is best to let the builder exceed a minimum code and build a home according to their own level of skill and expertise.

Cost Impact:

Approximate savings, as per code change recommended above, \$500 to \$1,800 varies with home size and design.

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City's Response:

The city sees no reason to delete the sealing of certain sources of air infiltration through the thermal envelope. It is the continuity created by sealing all the barrier penetrations that will ensure the building's thermal envelope will be properly sealed against air infiltration. The city is not aware of any studies or other evidence substantiating that health problems will be caused by sealing the thermal envelope. These deletions would also need to be made to the adopting ordinance for the 2009 IECC.

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**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: N1102.4.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

N1102.4.2 Air sealing and insulation. At the builder's discretion, ~~B~~building envelope air tightness and insulation installation shall be demonstrated to comply with one of the following options given by Section N1102.4.1 or N1102.4.2.2.

Reason:

A performance path for the thermal envelope provides a better use of the thermal envelope than a prescriptive path that enforces requirements not always anticipated by the code, which may later cause serious health problems for the dwelling's occupants. There are concerns over the number of qualified professionals in Missouri to conduct such testing.

Cost Impact:

Amendment could decrease costs by \$2,000 but that would be at the builder's discretion to choose, and it does not outweigh the code requirements in Chapter 11 that will significantly increase the cost of building.

City's Response:

The building division disagrees with this recommendation. Instead of a code requirement, the proposed language makes compliance with this section voluntary. The provisions of this section are intended to reduce the energy lost to infiltration and to improve insulation installation. This section includes 2 methods for demonstrating a home has a moderate level of air control. The building division is unaware of any studies or other evidence that shows sealing the building thermal envelope "may later cause serious health problems for the dwelling's occupants". The building division is also unaware of any shortage of qualified professionals who can conduct these tests.

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: N1102.4.2.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

N1102.4.2.2 Visual inspection option. The items listed in Table N1102.4.2, applicable to the method of construction, are field verified. Where required by the code official, an approved party independent from the installer of the insulation or builder representative, shall inspect the air barrier and insulation.

Reason:

This amendment is suggested as there is a serious shortage of qualified professionals to administer such test, which would lead to serious set backs in building and potential problems with unqualified personnel falsifying their training.

Cost Impact:

No estimated cost impact.

City's Response:

The building division disagrees with this recommendation. This section specifies a second option for verifying the air tightness of the building thermal envelope. The intent of this section is for a city-approved, independent, third-party to make this inspection. The building division is unaware of any shortages of qualified professionals capable of making this visual inspection.

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**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: N1102.4.3

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

~~**N1102.4.3 Fireplaces.** New wood burning fireplaces shall have gasketed doors and outdoor combustion air.~~

Reason:

Typically, wood burning fire places do not have doors, and builders cannot be expected to comply with a code when manufacturers do not produce a product being mandated. Also, forcing a fire box or fire place to comply with regulations that are recommended by the code but not the manufacturer would void the warranty on the product and be a serious risk to health and safety.

Cost Impact:

Removing the requirement from the code could save anywhere from \$6,000 to \$10,000 – price varies with size and style of fireplace.

City's Response:

The building division disagrees with this recommendation. Wood-burning fireplaces are a large source of air leakage when not in use. Loss of energy from fireplaces can be reduced by having gasketed doors that can be closed when not in use. Combustion air is already required by other sections of the code. If this section is deleted, the same section would need to be deleted from the city's adopting ordinance for the 2009 IECC.

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**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: N1103.2.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

N1103.2.1 Insulation. Supply ducts in attics and all other ducts shall be insulated to a minimum of R-8 R-4. ~~All other ducts shall be insulated to a minimum of R-6.~~

Reason:

Insulation to meet the requirement of a minimum R-8 and R-6 are not currently available in the St. Louis market and would require costly provisions to make those supplies available. R-4 materials are readily available, affordable for homeowners and provide adequate insulation for St. Louis' climate.

Cost Impact:

The proposed amendment will save approximately \$300 to \$500 per home.

City's Response:

The building division sees no reason for these less restrictive requirements to be included in the city's new residential building code. In speaking with area HVAC contractors, the R-6 and R-8 duct insulation is available. The initial cost will be offset by long-term energy cost savings to the buyers.

53.

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: N1103.2.2

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

N1103.2.2 Sealing. Ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section M1601.4. ~~Duct tightness shall be verified by either of the following:~~

- ~~1. Post construction test: Leakage to outdoors shall be less than or equal to 8 cfm (3.78 L/s) per 100 ft² (9.29 m²) of conditioned floor area or total leakage less than or equal to 12 cfm (5.66 L/s) per 100 ft² (9.29 m²) of conditioned floor area when tested at a pressure differential of .1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler end closure. All register boots shall be taped or otherwise sealed during the test.~~
 - ~~2. Rough-in test: total leakage shall be less than or equal to 6cfm (2.83 L/s) per 100 ft² (9.29 m²) of conditioned floor area when tested at a pressure differential of 0.1 inch w/g/ (25 Pa) across the roughed in enclosure. All register boots shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 4 cfm (1.89 L/s) per 100 ft² (9.29 m²) of conditioned floor area.~~
- Exception:** Duct sealing and tightness test is not required if the air handler and all most ducts are located within *conditioned space*.

Reason:

Provision is irrelevant as little residential equipment is located in the attic. But, it is a serious concern that there are few qualified individuals to conduct such tests, and these provisions will dramatically increase the cost of housing if mandated.

Cost Impact:

Estimated cost savings of amendment is \$800 per home.

City's Response:

The building division disagrees with this recommendation. If a new home has ducts or equipment located in an attic or crawl space these leakage tests will determine if conditioned air is being lost (leaked) to unconditioned spaces resulting in higher energy costs to the buyer.

54.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: R1305.1.4.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

M1305.1.4.1 Ground clearance. *Equipment and appliances* supported from the ground shall be level and firmly supported on a concrete slab or other *approved* material extending not less than 3 2 inches (76 50.8 mm) above the adjoining ground. Such support shall be in accordance with the manufacture's installation instructions. *Appliances* suspended from the floor shall have a clearance of not less than 6 inches (152 mm) from the ground.

Reason:

The extra inch of ground clearance offers no life or safety benefit to the homeowner. But, it does raise the cost of air conditioning systems as current concrete lifts do not meet this provision of the code and would require stacking and other expensive manipulations to achieve 3" above grade.

Cost Impact:

Cost savings:

Extra slab of concrete \$75 per inch/per unit

Custom concrete slab \$150 to 450 per unit

City's Response:

The building division disagrees with this recommendation. The intent of the 3 inches above grade is to keep the appliance being supported well above grade and protected from prolonged exposure to moisture and soil. The 3 inch minimum also provides some protection against settling of the slab.

55.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: *2009 International Residential Code*

Code Section: R1411.6

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

M1411.6 Locking access port caps. Refrigerant circuit access ports located outdoors shall be fitted with non-locking-type tamper-resistant caps.

Reason:

Locking type tamper-resistant caps are not currently available through manufacturers. Requiring this provision will not only increase the costs more than just the cost of the specific cap as it will require additional tools and training for installation and use.

Cost Impact:

If amended, then cost would decrease approximately \$100 per device – cap, installation, new equipment and training.

City's Response:

The building division disagrees with this recommendation. The locking cap requirement is intended to address a new type of substance abuse where people intentionally inhale refrigerant gases for the intoxicating effect. In some cases, this inhalant abuse has resulted in the death of an individual. The locking-type caps are designed such that wrenches, pliers and fingers cannot be used to remove the caps without a special tool/key.

56.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: M1503.4

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

M 1503.4 Make up air required. Exhaust hood systems capable of exhausting in excess of 400 600 cubic feet per minute ($0.19\text{m}^3/\text{s}$) shall be provided with makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Reason:

This new regulation increasing the requirement for make-up air would lower the threshold to the point that almost all kitchens would require make-up air. All of the provisions associated with installing such a system – connections to exhaust systems, electrical interlocking, fan requirements and a conditioner – would dramatically increase the cost of construction with little to no health or safety benefit for the homeowner.

 Cost Impact:

City's Response:

Research has shown that kitchen exhaust systems with an exhaust flow rate in excess of 400 cfm for an individual dwelling unit are greatly oversized. The industry recommendation is a minimum of 40 cfm exhaust rate per linear foot of cooktop. A 48 inch wide cooktop can be adequately served by an exhaust system that has an exhaust rate of 160 cfm. The continued operation of a kitchen exhaust system with an exhaust flow rate in excess of 400 cfm can "depressurize" an air-tight home to the point that "backdrafting" of carbon monoxide gases from gas-fired appliances and woodburning fireplaces can occur. This code requirement is recommended by several mechanical contractors who have stated that the 400 cfm threshold is reasonable and that any exhaust system greater than 400 cfm resembles a commercial-type range hood that is required to be provided with make-up air.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: Table M1601.1.1(2)

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

Duct Size	Minimum Thickness Inches and (mm)	Equivalent Galvanized Sheet No.	Minimum Thickness (in.)
Round Ducts and enclosed rectangular ducts			
14 inches or less	0.0157 (0.3950 mm)	28	0.0175
16 and 18 inches	0.0187 (0.4712 mm)	26	0.018
20 inches and over	0.0236 (0.6010 mm)	24	0.023
Exposed rectangular ducts			
14 inches or	0.0157 (0.3950 mm)	28	0.0175
Over 14 inches	0.0187 (0.4712 mm)	26	0.018

Type of Duct	Size (inches)	Minimum Thickness (inch)	Equivalent Galvanized Sheet Gauge	Approximate Aluminum B & S Gauge
<u>Round ducts and enclosed rectangular ducts</u>				
	<u>14 or less</u>	<u>0.013</u>	<u>30</u>	<u>26</u>
	<u>Over 14</u>	<u>0.016</u>	<u>28</u>	<u>24</u>
<u>Exposed rectangular ducts</u>				
	<u>14 or less</u>	<u>0.016</u>	<u>28</u>	<u>24</u>
	<u>Over 14</u>	<u>0.019</u>	<u>26</u>	<u>22</u>

Reason:

New provisions listed would require pipe manufacturers to change their complete manufacturing systems and when combined with additional labor it would be an extremely expensive change with little to no health or safety benefit. Proposed table is from the 2006 IRC.

Cost Impact:

If amended, there would be an approximate decrease of \$300 to \$400 in material and labor

58.

City's Response:

The building division disagrees with this recommendation. The 2009 IRC has increased the minimum thicknesses for all round ducts. The minimum thicknesses indicated are the low end of the tolerance range according to SMACNA HVAC Duct Construction Standards.

59

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: M1601.4.1

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

M1601.4.1 Joints and seams. Joints of *duct systems* shall be made substantially airtight in an unconditioned area by means of tapes, mastics, liquid sealants, gasketing or other *approved* closure systems. Closure systems used with rigid fibrous glass ducts shall comply with UL181A and shall be marked 101A-P for pressure-sensitive tape, 181 A-M for mastic or 181 A0H for heat-sensitive tape. Closure systems used with flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked 181B-FX for pressure-sensitive tape or 181B-M for mastic. Duct connections to flanges of air distribution system *equipment* or sheet metal fittings shall be mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL181B and shall be marked 181B-C. Crimp joints for round metal ducts shall have a contact lap of at least 1½ means of at least three sheet-metal screws or rivets equally spaced around the joint. Closure systems used to seal metal ductwork shall be installed in accordance with the manufacturer's installation instructions.

Reason:

Efficiency mandated in language without new additional language is not a health or safety issue for the dwelling's occupants. These type of mandates should be a choice and lifestyle chosen by the consumer so that they have the desire and energy to fully understand how system changes, such as these, will effect their life in their home.

Cost Impact:

If amended, there would be an approximate decrease of \$500 to \$2,000 depending on the size of the home.

City's response:

The building division disagrees with this recommendation. The intent of the building code is to seal all joints and seams in all duct systems. The EPA estimates that 20 percent of the energy efficiency of heating and cooling systems can be lost due to duct air leaks located in basements, stud cavities, crawl spaces, attics, etc.

60.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: 2009 *International Residential Code*

Code Section: G2408.4

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

G2408.4 (350.7) Clearances from grade. Equipment and appliances installed at grade level shall be supported on a level concrete slab or other approved material extending not less than ~~3~~ 2 inches (~~76~~ 50.8 mm) above adjoining grade or shall be suspended not less than 6 inches (152 mm) above adjoining grade. Such supports shall be installed in accordance with the manufacturer's installation instructions.

Reason:

The extra inch of ground clearance offers no life or safety benefit to the homeowner. But, it does raise the cost of air conditioning systems as current concrete lifts do not meet this requirement.

Cost Impact:

Cost savings range from \$225 to \$525:

Extra slab of concrete \$75 per inch/per unit

Custom concrete slab \$150 to 450 per unit

 **City's Response:**

See city's response to M1305.1.4.1

61.

Creve Coeur
Building Code Review

Code Change Proposal Form

Code: 2009 International Residential Code

Code Section: P 2503.6

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

P2503.6 Shower liner test. ~~Where shower floors and receptors are made water tight by the application of materials required by Section 2709.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor and receptor area shall be filled with potable water to a depth of not less than 2 inches (51 mm) measured at the threshold. Where a threshold of at least 2 inches high does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2 inches deep measured at the threshold. The water shall be retained for a test period of not less than 15 minutes and there shall be no evidence of leakage.~~

Reason:

Leaks are not known at the time of the liner test as these are typically not evident until the tile and insulation are installed.

Cost Impact:

Approximately \$50 cost savings



City's Response: The city has adopted the same plumbing code as St. Louis County. The city contracts with the county to issue the city's plumbing permits and make the city's plumbing inspections.

62.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: *2009 International Residential Code*

Code Section: P 2706.3

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

P2706.3 Prohibited waste receptors. Plumbing fixtures that are used for washing or bathing shall not be used to receive the discharge of indirect waste piping.

Exceptions:

1. A kitchen sink trap is acceptable for use as a receptor for a dishwasher.
2. A laundry tray is acceptable for use as a receptor for a clothes washing machine.
3. A condensate drain for use as a receptor from mechanical equipment.

Reason:

Condensate lines running from mechanical equipment to receptors can be the most efficient and effective method for discharge.

Cost Impact:

City's Response: The city has adopted the same plumbing code as St. Louis County. The city contracts with the county to issue the city's plumbing permits and make the city's plumbing inspections.

63.

**Creve Coeur
Building Code Review**

Code Change Proposal Form

Code: *2009 International Residential Code*

Code Section: P 2903.5

Proponent: Home Builders Association of St. Louis and Eastern Missouri

Revise as follows:

P 2903.5 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are used. Water-hammer arrestors shall be installed in accordance with the manufacturer's installation instructions. Water hammer arrestors shall conform to ASSE 1010.

Reason:

This amendment is offered because the quick shut off arrestor is preferred as air pockets form on quick close fixtures, not arrestors, and this practice is better for the health and safety of the occupant.

Cost Impact:

Estimates show a minimal cost decrease



City's Response: The city has adopted the same plumbing code as St. Louis County. The city contracts with the county to issue the city's plumbing permits and make the city's plumbing inspections.

Richard M. Kutta, PE

24 Colonial Hills Parkway

Creve Coeur MO 63141

314 518-7244

Fax 314 567-4194

richardkutta@earthlink.net

EXHIBIT D

March 8, 2013

Mr Steve Unser, Chief Building Official
City of Creve Coeur
300 N. New Ballas Rd.
Creve Coeur MO 63141

Re: Comments on Proposed IRC 2009 Residential Building Code

Dear Mr. Unser,

The following comments are offered for consideration.

R102.8 Matters Not Provided For

This item, carried over from the existing ordinance, differs from customary building code enforcement practice, which authorizes enforcement of code provisions that are explicitly stated. The proposed section expands enforcement to additional provisions that are deemed "essential" in the opinion of the building official. In effect, this section authorizes creation of ex post facto regulation, makes the City building official a code-writer and subjects design professionals and contractors to unanticipated Code requirements that may delay completion and increase project costs. All of which is inappropriate for code enforcement.

Recommendation: Delete section.

Building Division's Response:

This section has been in the city's building code since 1976. The city attorney has reviewed this section and found it not to be contrary with any state laws. Evolving technology inevitably results in a situation or circumstance in which the code is silent on hazards since identified. The reasonable application of the code to such hazardous, unforeseen conditions is provided for in this section. The purpose of this section is not to impair requirements that may be preferred when the code provides for alternative methods or is not silent on the circumstances. Also, per Section R112.1, any decision of the building official may be appealed to the Building Code Board of Appeals.

R104.12 Rule-making Authority

This section derives its authority from Missouri statutes regarding rule-making, which limit rules to procedures for implementing existing regulations and which requires

adherence to a statutory rule-making procedure that involves publication, notice, and hearings. Application has not followed the statutory limitations.

Recommendation: Delete section or revise the first sentence as follows, “The building official shall have authority *in accordance with Missouri statutes regarding rule-making*, as necessary ...”

Building Division's Response:

This section has been in the city's building code since 1976. The city attorney has reviewed this section and found it not to be contrary with any state laws. The intent of this section is to give the building official the administrative authority to promulgate rules and regulations that serve to interpret or supplement the provisions of the code, as long as such rules conform to the intent of the code. These rules are not intended to set aside or waive any code provisions, but are intended to implement code compliance. These rules are not to conflict with accepted engineering practice or reduce the level of life safety prescribed by the code. The most frequent use of this authority is the promulgation of the administrative rules and procedures for the division's efficient and effective operation. An example of the content of administrative rules is the type of work that is required to be inspected per Sections R109.1 through R109.3.14.

R302.14 Fire protection of floors

This item from IRC 2012 accelerates the customary code adoption cycle by three years. It is therefore not coordinated with the 2009 code and pushes the limits of building materials technology. It requires installation of drywall basement ceilings unless dimensional (typical 2x12) lumber is used. It effectively prohibits use of composite trusses commonly referred to as “I-joists, “TJ’s” or truss-joists, which have been common practice for 35 years. No instances of issues in Creve Coeur were offered as justification.

The justification is based on physical fire tests and a Finite Element Method computer simulation conducted by Underwriters Laboratory, a private testing service. The UL fire test case used 14' long, 11-7/8" deep joists spaced 24" on center, exposed to a gas-fired furnace capable of producing temperatures of 1200-1400F. Two 300 pound weights were placed mid-span. The test ran for 6 minutes at which point the floor collapsed.

The test is not representative of typical Creve Coeur residential construction because it uses wide 24" joist spacing, immediately applies high furnace temperatures and disregards the benefit of smoke/fire detectors, which will initiate occupant evacuation and hasten fire department response. Under actual fire conditions the detectors would alarm a fire condition well before the test temperatures are reached, initiating FD response and evacuation.

TJ's have become common because they produce an economical main floor deck that is stiff, solid and flat. The web (vertical element of the joist) is made of oriented strand board, a pressed and temperature cured composite of wood and resin. The proposed amendment produces a choice that no homeowner will want: dimensional lumber or inaccessible plumbing, wiring and HVAC ductwork. Dimensional lumber is costly to

purchase and install, prone to warping, twisting and checking, and functionally undesirable due to resultant bouncy, squeaking floors when the lumber dries out and deforms. Because TJ's are manufactured from flaked wood rather than solid lumber, they earn LEED credits for resource reutilization. Installing a drywall basement ceiling greatly extends the construction schedule by requiring all utilities to be finally connected and tested before the ceiling can be closed. It also makes future remodeling much more difficult and costly because portions of the drywall will have to be removed and replaced.

In response to the forthcoming 2012 code cycle, Weyerhaeuser has developed and tested a new TJ that has a 1-hour fire resistance rating. It is not yet widely available but is planned for national release late in 2013. It uses an intumescent paint that expands in the presence of heat, insulating the underlying wood substrate from the fire heat.

Alternative measures will produce improved fire safety integrity:

1. limit maximum joist spacing to 18" and the maximum unsupported span to 14' between steel support beams.
2. require wired fire/smoke detection
3. except areas protected by fire-rated lay-in suspended ceilings, which easily produces a 30-minute rating while allowing finished family rooms to have fewer columns without compromising accessibility or fire-safety

Recommendation: Defer consideration until the 2012 code cycle, which gives joist manufacturers time to distribute fire-rated joists and time for code-writers to develop alternative equivalent designs, if still necessary.

Building Division's Response:

For reasons previously stated on the building division's page of the city's website, the building division believes that this proposed amendment is necessary. This proposed amendment is already required in the 2012 IRC which was published over a year ago. There is no doubt that engineered wood products such as I-joists, when installed per the manufacturer's recommendations, meet all structural code requirements. A deficiency they have is how they perform during a fire event. When unprotected, they burn faster than dimensional lumber, which raises the concern regarding firefighter safety during fire rescue operations. There are documented cases of firefighters being injured and even killed because of the rapid failure of these type of joists during fire events. The building division believes the additional 15-20 minutes of fire protection afforded by this ½" membrane outweighs the cost and possible inconvenience of installing it.

M1503.1 General (Kitchen range hoods)

This section has internal conflicts between hoods which exhaust to the outside and those recirculation hoods which have no connecting ductwork. For example, "either type of system shall be a listed exhaust system" requires exhaust ductwork on a recirculation system that has no ductwork. Customarily this section defines the requirements for systems that exhaust to outside and then excepts recirculation systems.

Recommendation: Limit section to vented hoods followed by an exception for recirculation systems

Building Division's Response:

The building division agrees with this comment. The original code language is less confusing and has an exception for ductless range hoods/recirculation systems.

M1503.4 Makeup air required

This section requires tempered makeup air for kitchen range hoods that exceed 400 cfm. The justification for the 400 cfm cutoff is that larger systems are “greatly oversized” and may cause back drafting products of combustion from gas-fired appliances such as furnaces and water heaters. The “oversized” statement is not supported by the International Mechanical Code (IMC 1346.6010 Appx C) which recommends a minimum of 450 CFM for a 9 sq ft kitchen exhaust hood against a wall and 675 CFM for an island installation. Larger hoods over larger ranges have minimum capacities up to 800 cfm. The 400 cfm cutoff disregards range manufacturer recommendations and effectively eliminates most of the available range hoods supplied by Broan, GE and other hood suppliers, where 500-1200 cfm hoods are common. The 400 cfm cutoff also ignores the ASHRAE standard 62.2 recommended maximum of 15 cfm/100 sq ft finished living area. Under the ASHRAE standard, a 3500 sq ft house would be allowed a maximum 525 cfm without makeup air.

Building Division's Response:

Section 1346.6010 Appendix C is not part of the 2003 or 2009 IMC. It is also not part of St. Louis County's Mechanical Code. Section 505.2 of the 2009 IMC has the same 400 cfm threshold as M1503.4 of the 2009 IRC.

The ASHRAE 62.2 standard is not referenced by the 2009 IMC, the 2009 IRC or St. Louis County's Mechanical Code. Neither the city or St. Louis County has a copy of this standard and cannot comment on the prescribed criteria.

The HVI (Home Ventilating Institute) recommends a minimum exhaust rate of 40 cfm per linear foot of range and a maximum of 100 cfm per linear foot of range for wall-mounted hoods and a minimum of 50 cfm/ft and a maximum of 150 cfm/ft for island installations. These are the exhaust rates they say will satisfactorily capture and remove moisture, airborne contaminants and odors created during cooking. Using these prescribed minimums, a cooktop 4 feet in length could be adequately served by a 160 cfm wall-mounted exhaust hood and an island cooktop 4 feet in length could be adequately served by a 200 cfm range hood hung over the island.

The fundamental intent of this requirement is avoidance of carbon monoxide poisoning, which could result from back drafting the flue vent from a gas-fired appliance equipped with an old-style “gravity” draft hood such as a furnace or water heater. New gas-fired appliances do not have draft hoods; they are provided with sealed combustion chambers which are unaffected by “depressurization” and should therefore be exempt. Houses with air or ground source heat pumps do not have gas-fired furnaces and should be exempt. Modern instantaneous water heaters are electric or have sealed power-burners. Gas-fired fireplaces are direct-vent or non-vented. Wood fueled fireplaces are provided with outside combustion air and gasketed doors. The whole issue is greatly mitigated by requiring installation of a carbon monoxide alarm in the living area.

The fundamental intent of this requirement is to prevent carbon monoxide poisoning resulting from depressurization and backdrafting of CO fumes from gas-fired appliances served by flue vents/chimneys. However, the code is also concerned about other adverse effects that can be caused by depressurization. Indoor air quality issues can arise as a result of air being drawn from garages, mechanical rooms and storage rooms.

Finally, the requirement for electric resistance heat to temper makeup air runs completely contrary to energy efficiency as it consumes 40,000 Btuh, which is about half the energy requirement of the furnace that heats the whole house. Such a tempered makeup air system will cost over \$2000 installed. Heating outside air so it can be immediately exhausted is contrary to energy conservation. Where needed, Broan offers a hood system with an interlocked makeup air duct and damper that supplies untempered air to the hood to replace air that is being exhausted.

Various design guidelines recommend that in order to maintain occupant comfort, makeup air temperature should be a minimum of 50 degrees F or within 10 degrees F of the preferred room temperature. I've seen a Broan hood system with an interlocked makeup air duct and damper that supplies untempered outside air to the kitchen but not directly to the hood itself. In speaking with HVAC contractors they recommend that makeup air should be provided outside of the hood so that the exhaust system will function properly. It would seem drawing untempered outside air into the kitchen would not be cost effective.

Recommendation: Incorporate the following modifications:

1. Amend the 400 cfm limit to allow the larger of 400 cfm or 15 cfm/100 sq ft finished floor area, per ASHRAE 62.2-2010.
2. Eliminate the requirement for tempered makeup air.
3. Except houses without gas-fired appliances and those with appliances that have sealed combustion systems.
4. Except houses equipped with an engineered thermal recovery ventilator that admits and tempers makeup air through the ventilator.
5. Except houses with a wired carbon monoxide sensor alarm on the main floor.

Please see the reasons stated above.

Thank you for this opportunity to provide commentary. Please contact me if there are questions.

Sincerely,

EXHIBIT E

**Fire Performance of
Engineered
Lightweight Lumber**

Rich Walke
UL Regulatory Services



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December 6, 2012

December 6, 2012.



Partners With the DHS Funded Research



Underwriters Laboratories (UL)



Chicago Fire Department (CFD)



International Association of Fire Chiefs (IAFC)



Michigan State University (MSU)



3

TEST SUMMARY

Test	Assembly	Type	Ceiling	Protective Membrane Breach (min : sec)	Flame Through (min : sec)	Fire Fighter Breach (min : sec)
→ 2	Wood I-Joist Floor	Modern	None	0:00	6:00	6:03
→ 1	2x10 Joist Floor	Legacy	None	0:00	18:30	18:45
→ 3	2x10 Joist Floor	Legacy	Regular Gypsum Board	23:30	44:15	44:45
8	2x10 Joist Floor	Legacy	Lath and Plaster	74:00 ¹	79:45*	79:45
→ 4	Wood I-Joist Floor	Modern	Regular Gypsum Board	17:45	26:45*	26:45
5	Metal Gusset Truss Floor	Modern	Regular Gypsum Board	16:30	28:40	29:15
6	Finger Joint Truss Floor	Modern	Regular Gypsum Board	16:00	26:00	26:45
7	2x6 Joist & Rafter Roof	Legacy	Regular Gypsum Board	15:45	38:00 ²	40:00 ²
9	Metal Gusset Truss Roof	Modern	Regular Gypsum Board	13:45	23:00*	23:15

* - Denotes approximate time

1 - Denotes total failure of ceiling - plaster & lath had deflected down to & was supported by TC's prior to event

2 - Flaming through roof vents occurred at 26:00



NFPA Journal Cover Story: Lightweight Construction

Alan R. Earls, NFPA Journal - Monday, March 18, 2013

Early in the afternoon of August 13, 2006, the fire department in Green Bay, Wisconsin, responded to a suspected residential basement fire. An engine company focused on the flames while a ladder company worked on ventilation. The department also had a report that someone was in the building and prepared to make an entry.

Firefighters Arnie Wolff and Jo Brinkley-Chaudoir arrived on the scene four minutes after the fire was reported. Approximately seven minutes later, at the request of the incident commander, they began a search of the home's first floor. They took the precaution of crawling in and sounding the floor to ensure it could support them. The floor, made of concrete for a radiant heating system, seemed solid. Satisfied it would hold, the firefighters inched their way into the structure on their hands and knees as the fire roared beneath them in the basement.

Within moments, they heard a loud cracking sound. The floor gave way, plunging them into the fiery basement. Despite a fractured hip and ribs and first-degree burns on her back and upper arms, Brinkley-Chaudoir managed to escape by crawling through a basement window. Wolff fell into another part of the basement, separated from Brinkley-Chaudoir by a partial wall and blocked by floor debris. Wolff, a 17-year veteran of the department, perished in the fire, and his body was recovered the next day. Medical examiners determined that he had died of smoke inhalation and burns.

An after-report of the incident by the National Institute for Occupational Safety and Health found that the concrete first floor had concealed the severity of the fire in the basement. The report highlighted the extreme speed with which lightweight wood I-joists, such as those used in the house that burned, can reach their failure point when exposed to fire.

The findings have become all too familiar for firefighters. In January 2007, Hamilton County, Tennessee, lost a "firefighter of the year" in another sudden structural collapse blamed on lightweight construction that failed in a fire. In April of that year, the failure of lightweight construction in a fire contributed to the death of a rookie firefighter in Prince William County, Maryland.

Such incidents have fueled a growing concern for the fire service and pose a significant challenge to the code community. In recent decades, an expanding range of construction methods and building products, particularly wooden truss roofing systems and wood I-joists that together are often termed "lightweight construction," have been widely embraced by residential builders for their ability to deliver economy and functionality. Lightweight residential structures began to appear widely about 25 years ago, according to APA-The Engineered Wood Products Association (formerly the American Plywood Association), and have become increasingly popular ever since. From an engineering perspective, lightweight materials and construction techniques often outperform traditional dimensional lumber and assembly methods. Many recently built communities across the country are composed entirely of lightweight structures.

In separate studies by Underwriters Laboratories (UL) and the National Research Council of Canada (NRC), however, findings confirmed what firefighters have long suspected about what happens to lightweight construction when it is exposed to fire. In repeated tests by both groups, under carefully controlled conditions, lightweight structures were found to burn faster and lose their structural integrity quicker—in some cases much quicker—than those built with dimensional lumber, with obvious ramifications for the fire service and for anyone who lives in a residence constructed with lightweight materials.

For the fire service, the issues around fire and lightweight residential construction are immediate and often visceral. In Green Bay, Assistant Fire Chief Robert Goplin says the increased potential for sudden and catastrophic structural failure presented by lightweight construction is forcing his department to rethink many of its fire and rescue practices. "We are trying to drive home to the troops that this stuff

Alan R. Earls is a writer based in Franklin, Massachusetts. He specializes in technical and safety topics.

SIDEBAR

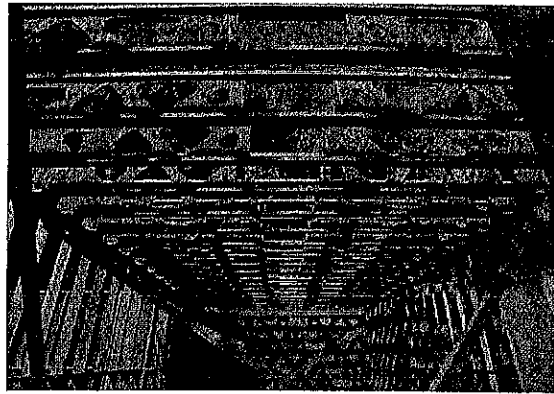
Danger for Firefighters

According to NFPA Fire Analysis and Research Department statistics, 250 firefighters died of injuries suffered at structure fires from 1997 to 2006. Of those, 44 were killed inside buildings as a result of structural collapses, and another nine were outside and struck when walls collapsed. Of the 44 killed inside, 24 were killed in roof collapses in 14 fires, 17 in floor collapses in 13 fires, two in a wall collapse in a fire, and one in a ceiling collapse.

Full details on construction are not available for many of the collapse incidents, but trusses were involved in the collapse in seven incidents. These seven incidents claimed 12 lives. Five firefighters died in two roof collapses where wood trusses, described as pre-engineered wood and lightweight wood, were involved. Three firefighters were killed in two collapses involving lightweight wood floor trusses. And another was killed in a floor collapse involving open manufactured wood I-beams.

The National Institute of Occupational Safety and Health (NIOSH) points out that carpet, ceramic tile, lightweight concrete, and similar floor coverings may increase the danger to firefighters because they add weight to the floor system and because the insulation these materials provide may cause the floor to not feel warm, despite the fire beneath it.

NIOSH also stresses that engineered wood I-joists represent a rising technology in the building sector, since it offers certain advantages over traditional construction methods. Changes in the building construction industry, driven by technological advancements and societal needs, suggest that the use of engineered wood products will continue to grow, according to NIOSH.



Even lighterweight materials – Georgia Pacific XJ-85

Cost Impact: The code change proposal will increase the cost of construction.

ICCFILENAME: DECRANE-RB-1-R501.3

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Based on the proponent's request and the committee's previous action on RB85-09/10.

Assembly Action:

None

Individual Consideration Agenda

This item is on the agenda for individual consideration because public comments were submitted.

Public Comment 1:

Sean DeCrane, Cleveland, OH, Fire Department, representing the International Association of Fire Fighters; Azarang (Ozzie) Mirkhah, Las Vegas, NV, Fire & Rescue, representing Fire & Life Safety Section of the International Association of Fire Chiefs); Steven Orłowski, National Association of Home Builders, Dennis Pitts American Wood Council, American Forest & Paper Association, requests Approval as Modified by this Public Comment.

Replace proposal as follows:

R501.3 Fire protection of floors. Floor assemblies, not required elsewhere in this code to be fire resistance rated, shall be provided with a ½ inch gypsum wallboard membrane, 5/8 inch wood structural panel membrane, or equivalent on the underside of the floor framing member.

Exceptions:

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with Section P2904, NFPA13D, or other approved equivalent sprinkler system.
2. Floor assemblies located directly over a crawl space not intended for storage or fuel-fired appliances.
3. Portions of floor assemblies can be unprotected when complying with the following:
 - 3.1 The aggregate area of the unprotected portions shall not exceed 80 square feet per story
 - 3.2 Fire blocking in accordance with Section R302.11.1 shall be installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly.
4. Wood floor assemblies using dimension lumber or structural composite lumber equal to or greater than 2-inch by 10-inch nominal dimension, or other approved floor assemblies demonstrating equivalent fire performance.

Commenter's Reason: This public comment was developed in response to the IRC Code Development Committee's comments regarding RB31, RB85, RB86, RB87 and RB88.

subjected to the same fire-test conditions, unprotected wood I-joist floors typically fail in four to eight minutes, depending on flange size and web thickness. The few minutes of difference in endurance times among the different types of joists is of no practical use to the firefighter for predicting the safety of the floor. It makes sense, therefore, that when there is a serious fire beneath a floor, there is no "safe" amount of time that anyone can remain on that floor. Any floor system protected or not, can fail unpredictably when exposed to a substantial fire beneath.

4. Gypsum Wallboard Provides Additional Floor Protection

Millions of homes have been built and are still being built with exposed wood floor joists - typically over some type of habitable basement area. The lack of a code-mandated fire-resistance requirement, such as a requirement for a one-hour fire-rated floor, means that the floor framing may not be protected on the underside.

A simple, inexpensive yet significant increase in fire resistance can be achieved in any type of joist or truss system by simply adding a single layer of gypsum wallboard to the underside of the floor joists. The use of 1/2-inch thick ordinary, unrated gypsum wallboard will very likely more than double the fire-endurance time for all commonly used wood floor joist systems, including sawn-lumber, open web wood trusses and I-joists.

Based on this, APA recommends the use of a single layer of 1/2-inch thick gypsum on the underside of all I-joists used in floor/ceiling assemblies over habitable spaces.

5. Summary

It is important for everyone, (home owner, building official, firefighter and others) to remain aware that no amount of additional protection will make any floor "safe" for any predictable minimum length of time when the underside of that floor is exposed to an intense fire. All floor/ceiling assemblies, however, will endure a severe fire longer if protected by gypsum wallboard, regardless of the type of floor framing.

Thus, firefighter and occupant safety can be addressed by early evacuation of occupants through the use of smoke detectors, by adding passive or active fire suppression such as by the use of gypsum wall board and equally important by firefighter education and pre-planning. The wood industry has been actively involved with the USFA in providing educational materials for the fire service and this effort is continuing.

Technical Services Division

DISCLAIMER

The information contained herein is based on APA - The Engineered Wood Association's continuing programs of laboratory testing, product research, and comprehensive field experience. Neither APA nor its members make any warranty, expressed or implied, or assume any legal liability or responsibility for the use, application of, and/or reference to opinions, findings, conclusions, or recommendations included in this publication. Consult your local jurisdiction or design professional to assure compliance with code, construction, and performance requirements. Because APA has no control over quality of workmanship or the conditions under which engineered wood products are used, it cannot accept responsibility of product performance or designs as actually constructed.



Creve Coeur FIRE PROTECTION DISTRICT

Administrative Center • 11221 Olive Boulevard • St. Louis, Missouri 63141-7652
Office (314) 432-5570 • Fax (314) 432-2367

April 16, 2013

Mr. Steve Unser
Building Division Manager
City of Creve Coeur

EXHIBIT I

RECEIVED
APR 16 2013
BUILDING DEPT.

Re: R501.3 Fire Protection of Floors

Dear Steve:

The Creve Coeur Fire Protection District is in full support of your amendment to the 2009 International Residential Code as follows:

R501.3 Fire protection of floors. Floor assemblies, not required elsewhere in this code to be fire-resistance rated, shall be provided with ½-inch gypsum wallboard membrane, 5/8-inch wood structural panel membrane, or equivalent on the underside of the floor framing member.

Exceptions:

1 through 4 - No changes made.

The following statistics were taken from an article written by Alan R. Earls, published in March 18, 2013 in the National Fire Protection Agency (NFPA) Journal:

According to NFPA Fire Analysis and Research Department statistics, 250 firefighters died of injuries suffered at structure fires from 1997 to 2006. Of those, 44 were killed inside buildings as a result of structural collapses, and another nine were outside and struck when walls collapsed. Of the 44 killed inside, 24 were killed in roof collapses in 14 fires, 17 in floor collapses in 13 fires, two in a wall collapse in a fire, and one in a ceiling collapse.

Full details on construction are not available for many of the collapse incidents, but trusses were involved in the collapse in seven incidents. These seven incidents claimed 12 lives. Five firefighters died in two roof collapses where wood trusses, described as pre-engineered wood and lightweight wood were involved. Three firefighters were killed in two collapses involving lightweight wood floor trusses. And another was killed in a floor collapse involving open manufactured wood I-beams.

I have attached a copy of the March 18, 2013 article with some highlighted segments.

Also, an important thing to know is that the change that is proposed has been written into the 2012 version of the IRC and the City would just be adopting this change in the 2009 version.

The ultimate goal of the Creve Coeur Fire Protection District is to provide safety for both the homeowners and the firefighters. It is our belief of that the adoption of the 2009 IRC, with this modification, will give the occupants more time to exit the structure and give firefighters the additional time to make entry to suppress a fire.

I have attached a copy of the March 18, 2013 article with some highlighted segments and a NIOSH report from the CDC describing the dangers to firefighters due to truss failures.

The Creve Coeur Fire Protection District truly appreciates your adding this amendment to your IRC adoption and appreciates the City Council's consideration in this matter.

Yours in Fire Safety:

A handwritten signature in black ink, appearing to read 'Arthur K. Oestereich', written in a cursive style.

Arthur K. Oestereich
Fire Marshal
Creve Coeur Fire Protection District



MONARCH FIRE PROTECTION DISTRICT

13725 Olive Blvd., Chesterfield, MO 63017-2640

Phone: 314.514.0900 Fax: 314.514.0696

www.monarchfpd.org

May 3, 2013

Steve Unser
Building Code Official
City of Creve Coeur
300 N. New Ballas Rd.
Creve Coeur, MO 63141

RECEIVED
MAY 03 2013
BUILDING DEPT.

EXHIBIT J

Dear Mr. Unser:

This letter is to confirm my support of the proposed language requiring protection of engineered lightweight floors in the City of Creve Coeur adoption of the 2009 Codes.

The intent of the Code clearly states, in part, that it is "...to provide safety to fire fighters and emergency responders during emergency operations." (Section 101.3).

This requirement is vital to occupant and emergency responder safety, as the time for escape and rescue in fire conditions is drastically shortened with the use of engineered lightweight lumber and modern furnishings.

Unlike those built with traditional sawn lumber, floors built with unprotected engineered lightweight lumber collapse suddenly and without warning when exposed to fire from the underside. This has been proven through tests by Underwriters Laboratories. In the tests, the engineered lightweight floors showed no significant heat signature when viewed with a thermal imaging camera until collapse was imminent. And the time from fire ignition to collapse was a mere 6 minutes after fire ignition – less than the time it takes for fire department arrival.

However, the application of ½-inch gypsum board on the bottom of the engineered lightweight floor system in the tests increased the time to collapse by 20 minutes. This would give emergency responders considerably more time for search and rescue.

The sponsors of the Code change that inserted this requirement into the 2012 International Residential Code included the National Association of Home Builders, as well as the American Wood Council which represents the industry that manufactures engineered wood products. The vote by membership of the International Code Council overwhelmingly approved this change because those sponsoring the Code change, and the voting membership, all agreed that the facts supporting the change undeniably outweighed the opposing arguments. Unprotected engineered lightweight construction involved with fire collapses much faster, and without much warning (if any at all); however the added protection gives time for occupant escape and search and rescue by emergency responders.

For the reasons stated above, I believe it is imperative that this proposed amendment be included in the City of Creve Coeur adoption of the 2009 Codes.

If you have any questions, please call me at 314-514-0900 ext. 313, or email me at herin.r@monarchfpd.org.

Yours in Firesafety,

A handwritten signature in cursive script that reads "Roger N. Herin".

Roger N. Herin, MCP
Fire Marshal

COMPARISON TABLE
BETWEEN
PRESENT ENERGY CONSERVATION CODE REQUIREMENTS
AND
2009 INTERNATIONAL ENERGY CONSERVATION CODE REQUIREMENTS.

NOTE: The Building Division will recommend that the 2009 International Energy Conservation Code and Chapter 11- Energy Efficiency- of the 2009 International Residential Code be adopted as written.

Building Element	Current Requirement	2009 IRC, Chapter 11 Or 2009 IECC, Chapter 4	What St. Louis County Did
Roof R Value	30	38	30
Wall R Value	13	13	13
Floor R Value	19	19	19
Crawl Space R Value	5	10	5
Exposed Duct R Value	5	8	4
Fenestration U- Factor	0.40	0.35	0.40
Programmable Thermostats	Not Required	Required	Required
High Efficiency Light Bulbs	Not Required	Required for 50% of permanent light fixtures	Required for 50% of permanent light fixtures
Thermal Envelope Sealing/Testing	Not Required	Required	Amended 'sealing' Deleted 'testing'
Permanent Energy Conservation Certificate Posted	Not Required	Required	Deleted
Duct Sealing / Testing	Sealing Required Testing Not Required	Sealing and Testing Required	Sealing Required Testing Deleted
Wood-Burning Fireplaces	Can be open to a room.	Must have gasketed doors and outside air	Deleted
Thermal Cover for Heated Swimming Pools	Not Required	Required	Required
Insulating & Weatherstripping Attic Access Panels	Not Required	Required	Insulating Required Weatherstripping Deleted



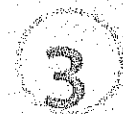
FOR NEW HOMES IN
MISSOURI
CLIMATE ZONE 4

TRUE COST OF THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE

Homes are the biggest investment we make—and everyone deserves a home that meets national minimum energy efficiency standards. While it's true that homeowners can always improve the efficiency of their homes, it is far more cost-effective to upgrade building components during construction, putting in better windows or swapping out one grade of insulation for a better one. Here's what buyers get with the 2009 IECC:



Payback Period
14 months



3-year Profit
\$476.75

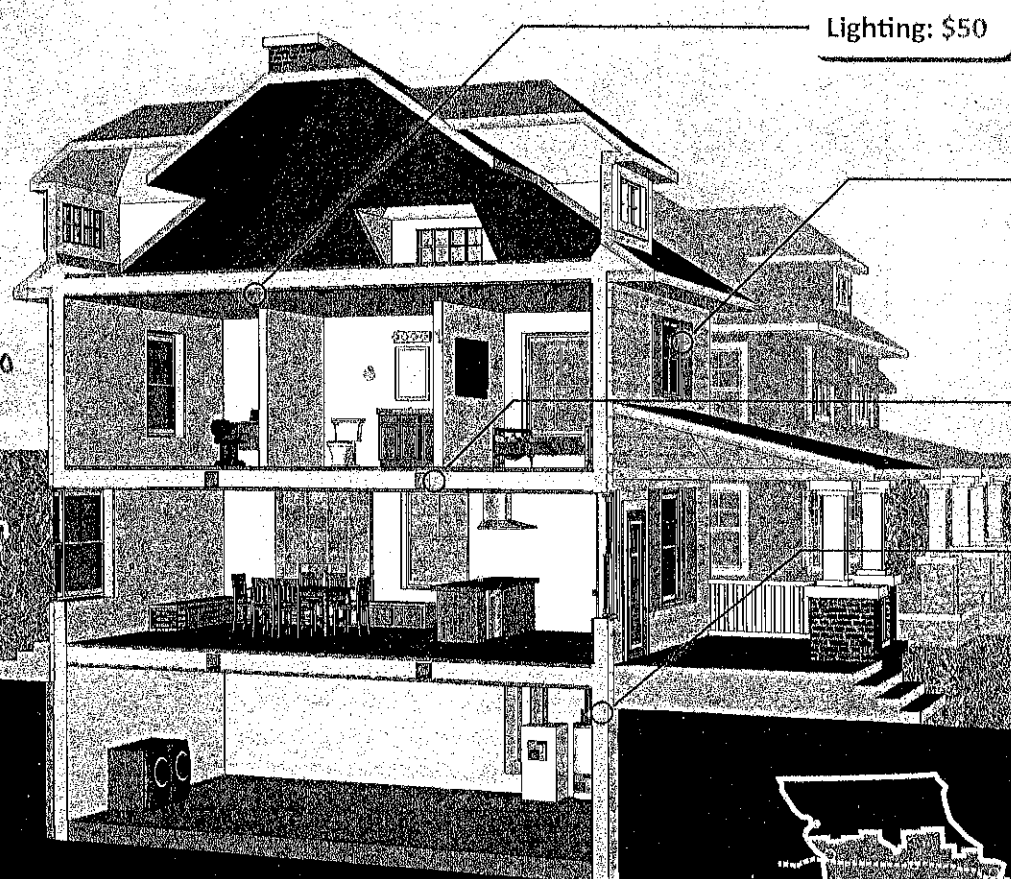


Annual Energy Reduction
18%



5-year Profit
\$992.69

18%



Climate Zone 4

u-factor: .5 $\Rightarrow$.35

r-value: 30 $\Rightarrow$ 38

□□□□□□
WINDOW
INSULATION
CEILING



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES



For the full Incremental Cost Analysis study, please visit bcap-ocean.org

TRUE COST OF THE



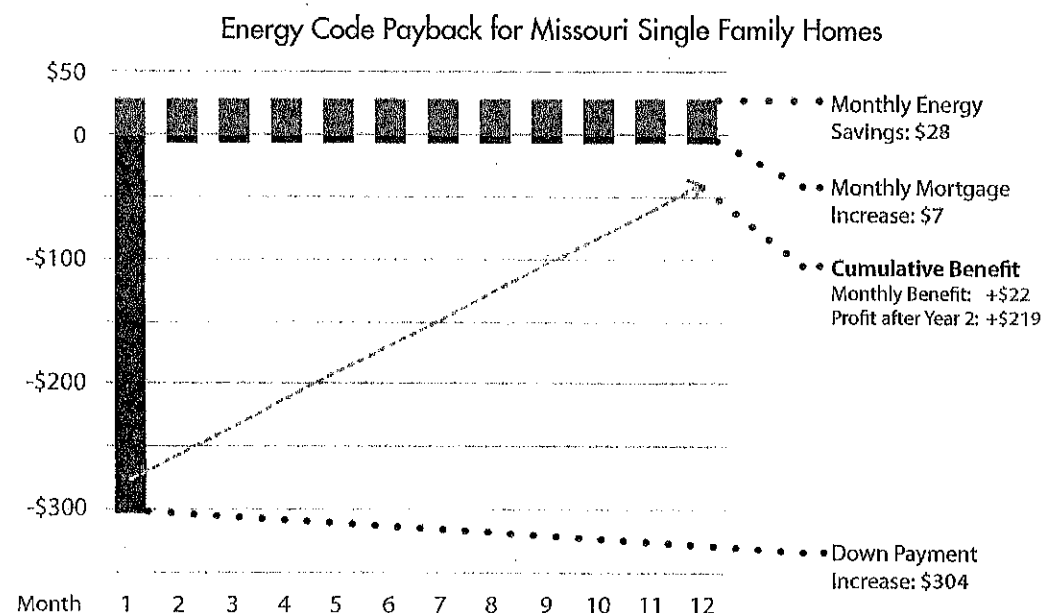
FOR NEW HOMES IN
MISSOURI
CLIMATE ZONE 4

2009 INTERNATIONAL ENERGY CONSERVATION CODE

One of the major barriers to energy code adoption across the country is the concern that new codes will add to the purchase price and potential buyers will not be able to afford the homes they want. In Missouri, upgrading homes to the 2009 International Energy Conservation Code will actually reduce out-of-pocket expenses for homeowners – paying off their initial investment in a matter of months.

For the average new home built in IECC climate zone 4*, BCAP estimates the costs of the new code will add no more than a total of \$1,519 in construction costs—an increase of only 0.6%. When this amount is rolled into the average mortgage, real costs to homebuyers will mean a down payment increase of \$303.72 and \$6.56 extra on monthly mortgage bills.

These added mortgage costs will be offset, however, by monthly energy savings of \$28.06, helping homebuyers pay off their initial investment in only fourteen months. After breaking even in month fourteen, the home will return buyers a profit of \$22 per month—for a total return of \$258 every year. This return on investment is graphed below and presented as a balance sheet at right.



Month	Mortgage Increase	Monthly Energy Savings	Cumulative Cost/Benefit
1	\$303.72	\$28.06	-\$275.66
2	\$6.56	\$28.06	-\$254.17
3	\$6.56	\$28.06	-\$232.67
4	\$6.56	\$28.06	-\$211.17
5	\$6.56	\$28.06	-\$189.67
6	\$6.56	\$28.06	-\$168.18
7	\$6.56	\$28.06	-\$146.68
8	\$6.56	\$28.06	-\$125.18
9	\$6.56	\$28.06	-\$103.68
10	\$6.56	\$28.06	-\$82.19
11	\$6.56	\$28.06	-\$60.69
12	\$6.56	\$28.06	-\$39.19
13	\$6.56	\$28.06	-\$17.69
14	\$6.56	\$28.06	\$3.81 Break Even
15	\$6.56	\$28.06	\$25.30 \$22 profit every month
16	\$6.56	\$28.06	\$46.80
17	\$6.56	\$28.06	\$68.30
18	\$6.56	\$28.06	\$89.80

This model assumes an average sale price of \$267,451 for a 2,400 square foot home. The mortgage is conservatively set at 30 years, with 20% down and the current average nationwide interest rate of 5.05%. With a lower down payment—such as 10% down—consumers will break even on their investment even sooner.

* Missouri's climate zone 4 covers the lower three-fourths of the state, and represents 93% of the state's population

RECEIVED

APR 19 2013

BUILDING DEPT.

EXHIBIT M

April 17, 2013

The Honorable Barry Glantz and
Honorable Members of the Creve Coeur City Council
300 N. New Ballas Road
Creve Coeur, MO 63141

Dear Mayor Glantz and Creve Coeur City Council Members:

The Homes Builders Association of St. Louis and Eastern Missouri (HBA) and its 600 business members are greatly concerned with the integrity of home construction. Therefore, every code cycle the HBA writes and proposes code amendments with the intent to achieve the delicate but necessary balance of maintaining superb health and safety standards while still allowing home owners to have the flexibility needed to make their residence a home that meets their families' needs and lifestyle choices.

To this end, the HBA conducts a thorough review every code cycle of the International Code Council's code products that are relevant for home construction. The review of the *2009 International Residential Code* included a varied group of industry experts including, but not limited to, builders, engineers, architects, fire service representatives, utility representatives, and various associate sub-contractor groups (electricians, plumbers, HVAC specialists, truss and window supply companies, and other various disciplines within the industry). These amendments were submitted to the City and discussed with City Staff during the public comment period of the code adoption process.

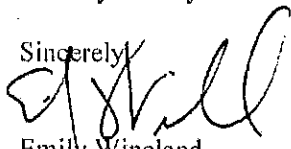
To date, none of the HBA comments were approved by City Staff for incorporation into the adopting ordinance of the City of Creve Coeur. While the HBA appreciates the consideration of staff, the dismissal of HBA's industry expertise and knowledge of the needs of consumers is disappointing. If the current version of the City's code ordinance is adopted, the City of Creve Coeur will face a significant market disadvantage when compared to its surrounding communities – Ladue, Frontenac, Olivette, Chesterfield, etc. – as those municipal codes allow greater flexibility for families to work with builders to customize a home that better fit their families' needs and choices for their own homes.

It is common for municipalities and counties to work with the home building industry to customize a code – from these international models – that is appropriate for their jurisdiction and the needs of its current and future constituents. And, the HBA would appreciate the opportunity to work with you to explain these technical issues and the recommended HBA amendments.

I am happy to facilitate such discussions at any time, please do not hesitate to contact me if you are interested.

Thank you for your time and consideration on this important issue.

Sincerely,



Emily Wineland
Staff Vice President for Public Policy
314-817-5625

CC: Mark Perkins, City Administrator, Creve Coeur
Steve Unser, Chief Building Official, Creve Coeur
HBA Codes Advisory Committee
HBA St. Louis County Board of Trustees
Patrick S. Sullivan, Executive Vice President

HOME
BUILDERS
ASSOCIATION
OF ST. LOUIS
& EASTERN
MISSOURI

10104
OLD OLIVE
STREET ROAD

ST. LOUIS,
MISSOURI
63141-5908

314 994 7700

FAX
314 432 7185

WEBSITE
WWW.STLHBA.COM



AN ORDINANCE AMENDING SECTION 240.020 OF THE CREVE COEUR CODE OF ORDINANCES PERTAINING TO ICE RENTAL FEES.

WHEREAS, increasing operating costs require the City to review fees on a regular basis, and

WHEREAS, the City staff has reviewed and compared its fees to those in neighboring municipalities and private ice arenas and found certain fee increases to be appropriate, and

WHEREAS, the Parks and Recreation committee reviewed the proposed fee increases and recommended approval at its meeting on May 23, 2013.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CREVE COEUR, AS FOLLOWS:

SECTION 1. Section 240.020 of the Creve Coeur Code of Ordinances is amended as follows effective September 1, 2013:

Ice rental, per hour (0 – 8 hours per contract):	\$205.00
(8.25 – 24.0 hours per contract):	\$200.00
(24.25+ hours per contract)	\$195.00

SECTION 2. Ice rental resident rate of \$190.00, discount rate (1,000 hours users) of \$180.00 and city figure skating club rate of \$170.00 are hereby deleted effective September 1, 2013. Except as expressly revised in this ordinance all other provision of Section 240.020 remain in effect.

SECTION 3: Contracts entered into and fully executed prior to the effective date of this ordinance shall be honored at the fees and rates specified in the contracts regardless of fee and rate adjustments in this ordinance.

SECTION 4. This Ordinance shall become effective September 1, 2013, pursuant to the provisions of 3.11(g) of the Charter.

Adopted this _____ day of _____, 2013.

Approved this _____ day of _____, 2013

Scott Saunders, Council President

Barry Glantz, Mayor

ATTEST:

Deborah Ryan, City Clerk



INTEROFFICE MEMORANDUM

Date: May 21, 2013

To: Mark Perkins, City Administrator
From: Kirsten Barnes, Director of Recreation
Subject: Ice Rental Fees

The City has periodically raised fees for recreational services in order to offset rising operating costs while also appropriately pricing its services within the regional market. As part of this review, staff recently compiled a survey of ice rental fees in other St. Louis area cities and at private ice rinks throughout the market to determine viability of increasing ice rental fees at Dielmann Recreation Complex.

- **Municipal Indoor Rinks**
 - o Queeny Park: \$180 per Hour (only available mid-September – March)
 - o Brentwood: \$185 per Hour (rates up for review in 2014)
 - o Webster Groves: \$190 per Hour
 - o Kirkwood: \$200 per Hour (increased from \$190 on 4/1/13 and up for review again in 2014)
 - o St. Peters Rec-Plex: \$250 per Hour (seats up to 1500 with full-service grill and three sheets of ice attached to full-service recreation facility)
- **Private Indoor Rinks**
 - o Nine (9) metropolitan area rinks with “prime time” rates (typically 3 – 11 p) between \$230 and \$275 (average \$247)
 - o Seating capacities range from 250 to 2200 and are suitable for league play
- **Current Creve Coeur Rate: \$190 per Hour** and last increased in March 2010
 - o Due to extensive use, very limited ice availability during the hockey season including three (3) teams that are on a waiting list for open ice and another group that is negotiating weekly late-night ice for a men’s hockey league.
 - o Rink is not well-suited to high school hockey games because of limited spectator seating.
 - o Rink benefits include large locker rooms, spacious lobby, concessions with beer service and central location.

Based on the information above, staff finds it prudent to increase rates as follows:

- Contracts for 0 – 8 hours of Ice \$205 per Hour
- Contracts for 8.25 – 24.0 hours of Ice \$200 per Hour
- Contracts for 24.25+ hours of Ice \$195 per Hour

This graduated scale gives a volume discount to our largest users but is still competitive for users who rent only a few hours of ice. It also encourages groups to commit to long-term agreements and thus reduces administrative costs.

NOTE: Contracts do include a clause that there are no refunds for unused ice. This insures that a group does not contract for 25 hours to get a lower rate and then cancels ice at the last minute. As a general practice and a service to our users, if a group needs to release ice, the Director works with them to find an alternate group to use the ice when possible.

It is recommended that these rates go into effect on September 1, 2013, to coincide with the start of the new hockey season, and that rates be reviewed again prior to the 2014 fall season.

**AN ORDINANCE APPROVING A FINAL SUBDIVISION PLAT FOR A SUBDIVISION
KNOWN AS 222 NORTH MASON ROAD, CITY OF CREVE COEUR, ST. LOUIS
COUNTY, MISSOURI**

WHEREAS an application has been submitted by The Enclave at Bellerive, LLC, for approval of a final plat of a subdivision known as 222 N. Mason Road north of Ladue Road and east of Mason Road; and

WHEREAS Final plat of 222 North Mason Road conforms to the preliminary plat approved by the Planning and Zoning Commission on November 5, 2012; and,

WHEREAS public notice of said final plat applications was provided in accordance with Section 410.140.C.2 of the Creve Coeur Municipal Code; and

WHEREAS the Planning and Zoning Commission recommended by a vote of 4-0 for approval of 222 North Mason Road on June, 3, 2013; and

WHEREAS, a copy of the proposed ordinance has been made available for public inspection prior to its adoption by the City Council and this bill having been read by title in open meeting two times before final passage by the City Council, and

NOW, THEREFORE, be it ordained by the City Council of the City of Creve Coeur, Missouri as follows:

SECTION 1: The Final plat of subdivision known as 222 North Mason Road, described as a tract of land being part of Lot 5 of the subdivision in partition of the Wm. Hogg Estate and parts of U.S. Survey 730, Township 45 North, Range 5 East, City of Creve Coeur, St. Louis County, Missouri, as heretofore submitted on May 13, 2013 are hereby approved subject to the following conditions:

1. The applicant shall provide two paper copies and one electronic copy of the recorded plat to the City of Creve Coeur.
2. The Applicant shall record documentation approved by the City Attorney whereby the trustees of the adjoining subdivision accept maintenance responsibility for the common ground described in the final plat.

SECTION 2: Such approval of the plats for the subdivision of the property shall be endorsed on said Plat as indicated in Section 1 hereof under the hand of the City Clerk, and the seal of the City of Creve Coeur, Missouri shall be affixed thereto.

SECTION 3: This ordinance shall become effective in accordance with Section 3.11 (g) of the City Charter.

ADOPTED THIS ____ DAY OF _____, 2013.

DR. SCOTT SAUNDERS
COUNCIL PRESIDENT

APPROVED THIS ____ DAY OF _____, 2013.

BARRY GLANTZ
MAYOR

ATTEST:

DEBORAH RYAN, MPCC
CITY CLERK



city of CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141
(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

APPLICATION TO PLANNING AND ZONING COMMISSION #13-013 APPROVAL OF THE FINAL PLAT FOR Lot A, 222 N. MASON ROAD

FOR THE MEETING OF: June 3, 2013

LOCATION: 222 N. Mason Road

REQUEST: Chris Vatterott, on behalf of The Enclave at Bellerive, LLC, has submitted an application for approval of the final plat for 222 N. Mason Road. The proposal involves the creation of a new residential lot just north of the Enclave Bellerive subdivision at the northeast corner of Mason and Ladue Roads.

ADDITIONAL INFORMATION: The preliminary plat for 222 N. Mason Road was approved in November 5, 2012. Review and approval of final subdivision plats is a ministerial act; if the drawings are largely the same as the preliminary plat that was already approved, and it is technically accurate, it must be approved by the Planning Commission and City Council.

Key Issues:

- Does the lot substantially meet all land development standards of this Chapter and those of any other applicable City regulations?

Subdivision Code References

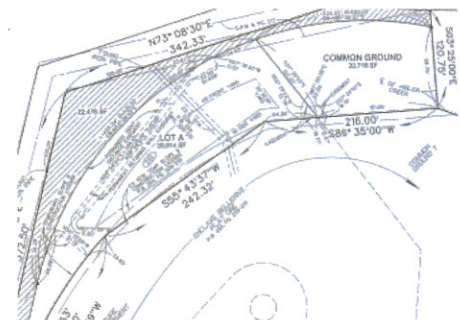
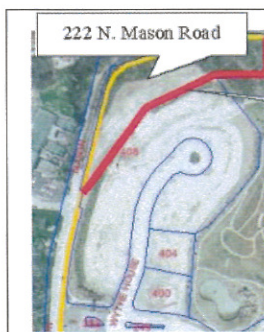
- Chapter 410: Subdivision and Development of Land

Zoning Code References

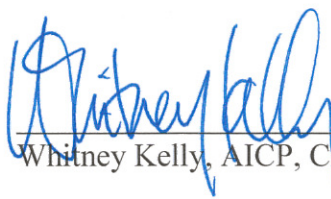
- Section 405.260: "B" Single Family Residential

APPLICANTS: Chris Vatterott
The Enclave Bellerive, LLC
332 Wythe House Court
Creve Coeur, MO 63141

OWNER: The Enclave Bellerive, LLC
332 Wythe House Court
Creve Coeur, MO 63141



REPORT PREPARED BY:


Whitney Kelly, AICP, City Planner

7/30/2013

Date

ATTACHMENTS: Applicant's Final Plat submitted May 30, 2013
Draft Ordinance

SUBDIVISION AND ZONING HISTORY

The Planning and Zoning Commission recommended approval of the Enclave at Bellerive preliminary subdivision plat on January 3, 2005. The City Council subsequently approved the development of Enclave at Bellerive on January 24, 2005, when the property was rezoned from “A” to “B” Single-Family Residential with an “RDD” Residential Design Development preliminary plat. A site development plan was also approved at that time for fifty-five houses. Ordinance No. 3037, that allowed for the rezoning, includes the following condition:

1. The applicant or public jurisdiction shall acquire right-of-way from the property, addressed as 338 N. Mason Road, for the placement of Mason Road as shown on the plan. To the extent the applicant acquires excess property beyond that needed for right-of-way, such excess property shall be incorporated into the development as additional open space and common ground. To the extent any such excess property is acquired by a public jurisdiction, the City would encourage that public entity to leave the space as undeveloped open space.

The applicant received approval of the preliminary plat on November 5, 2012, to create a new lot (Lot A, addressed as 222 N. Mason Road) on the land that was designated for the reconfiguration of Mason Road but is no longer needed by St. Louis County. The lot will be for the development of a single-family residence for sale. 338 N. Mason Road is the property immediately adjacent to the proposed Lot A, and was to be acquired for the use as a maintenance shed for the common ground which has not occurred and that lot is not part of this application.

The Final Plat is substantially the same as the preliminary plat and, since final plat review is largely a ministerial act, it should be approved by the Planning Commission and City Council.

RECOMMENDATION AND CONDITIONS OF APPROVAL

Should the Planning and Zoning Commission recommend approval of the proposed final plat, staff recommend the following condition be added:

1. The applicant shall provide two paper copies and one electronic copy of the recorded plat to the City of Creve Coeur.

ACTION

Action on this item will be in the form of a motion to recommend approval as presented, approval with additional conditions, to meet all technical requirements. The following are examples of motions for this application:

“I move to recommend approval of the final subdivision plat for 222 North Mason Road with the condition listed in the staff memo, dated May 30, 2013.” (Other conditions may be added, eliminated, altered, and modified by prior motion).

APPENDIX 1: COMPREHENSIVE PLAN

Included and attached by reference. See body of report for specific excerpts.

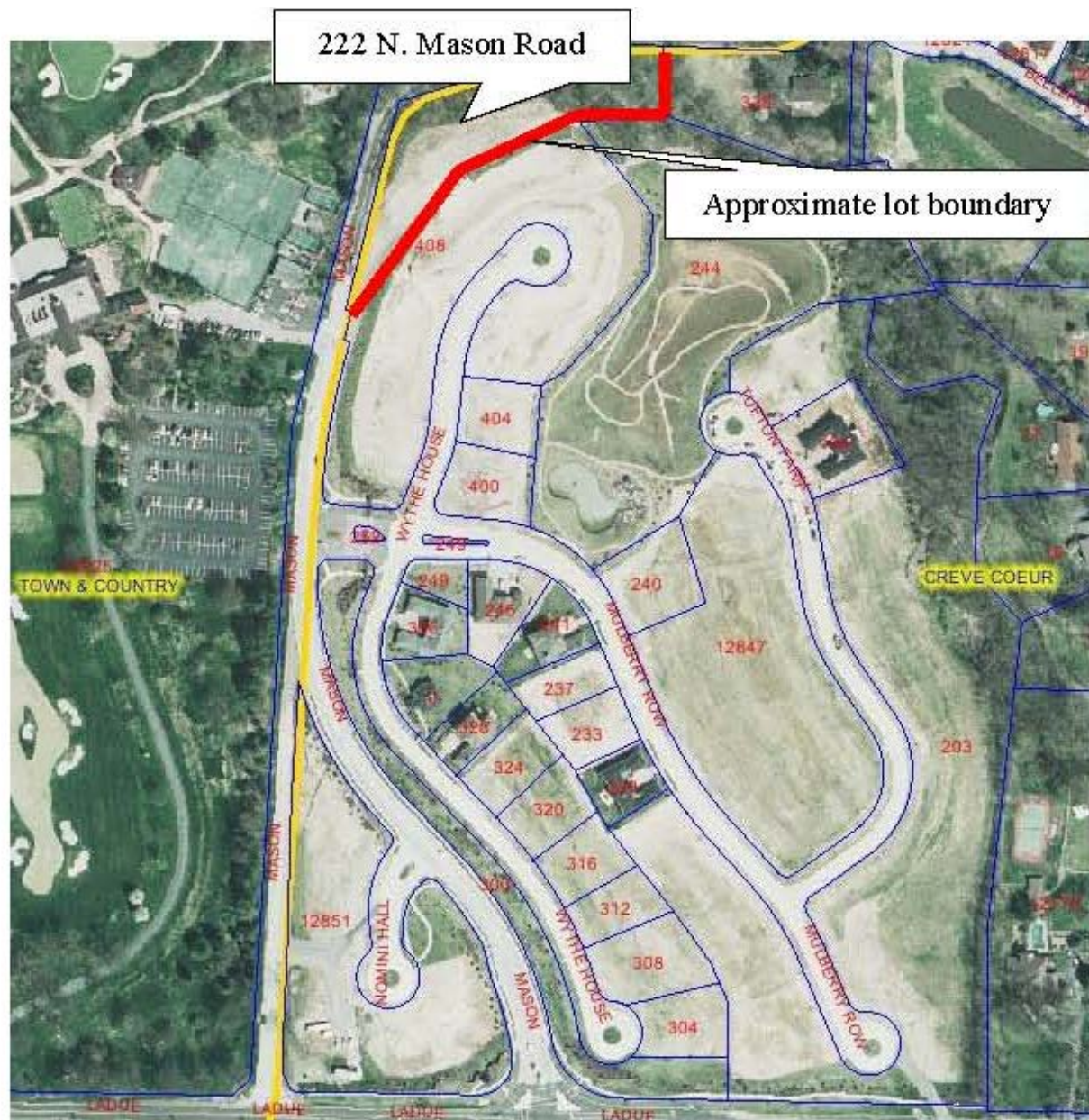
APPENDIX 2: ZONING CODE (CHAPTER 405 OF THE CREVE COEUR MUNICIPAL CODE)

Included and attached by reference. See body of report for specific excerpts.

**APPENDIX 3: CREVE COEUR SUBDIVISION AND LAND DEVELOPMENT REGULATIONS
(CHAPTER 410 OF THE CREVE COEUR MUNICIPAL CODE)**

Included and attached by reference. See body of report for specific excerpts.

APPENDIX 4: AERIAL MAP



Note that map only shows individual lots that have been recorded with St. Louis County Recorder of Deeds.

Legend

Lot Lines

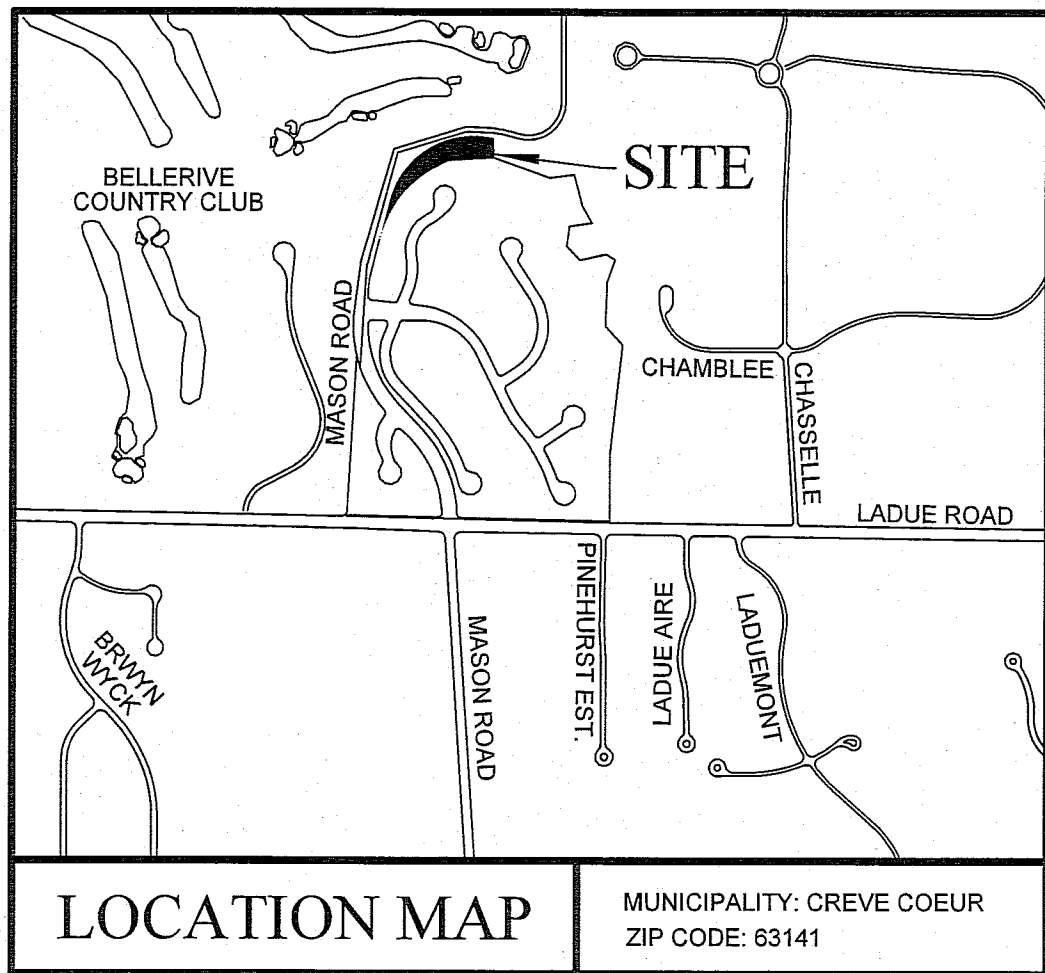


Not to Scale

APPENDIX 4: SITE PHOTOGRAPHS	Photo Date: 10/22/2012
 A photograph showing a view looking east from across Mason Road. In the foreground, there is a grassy area with a yellow fire hydrant. A paved road with a yellow center line runs horizontally across the middle. In the background, there is a parking lot and a fence, with trees showing autumn foliage under a cloudy sky.	Description: View looking east to the area for the proposed Lot from across Mason Road at the parking lot for the country club
 A photograph showing a view looking northeast from across Mason Road. The road with a yellow center line is in the foreground. A yellow diamond-shaped sign with a right-turn arrow and the number 20 is visible on the left side of the road. In the background, there is a grassy area, a fence, and trees with autumn foliage under a cloudy sky.	Description: View looking northeast from across Mason Road at the proposed lot.
 A photograph showing a view looking north along Mason Road. The road with a yellow center line is in the foreground. A yellow diamond-shaped sign with a right-turn arrow and the number 20 is visible on the left side of the road. In the background, there is a grassy area, a fence, and trees with autumn foliage under a cloudy sky. A sign for 'PUBLIC NOTICE' with the number '872-257' is visible on the right side of the road.	Description: View looking north along Mason Road.

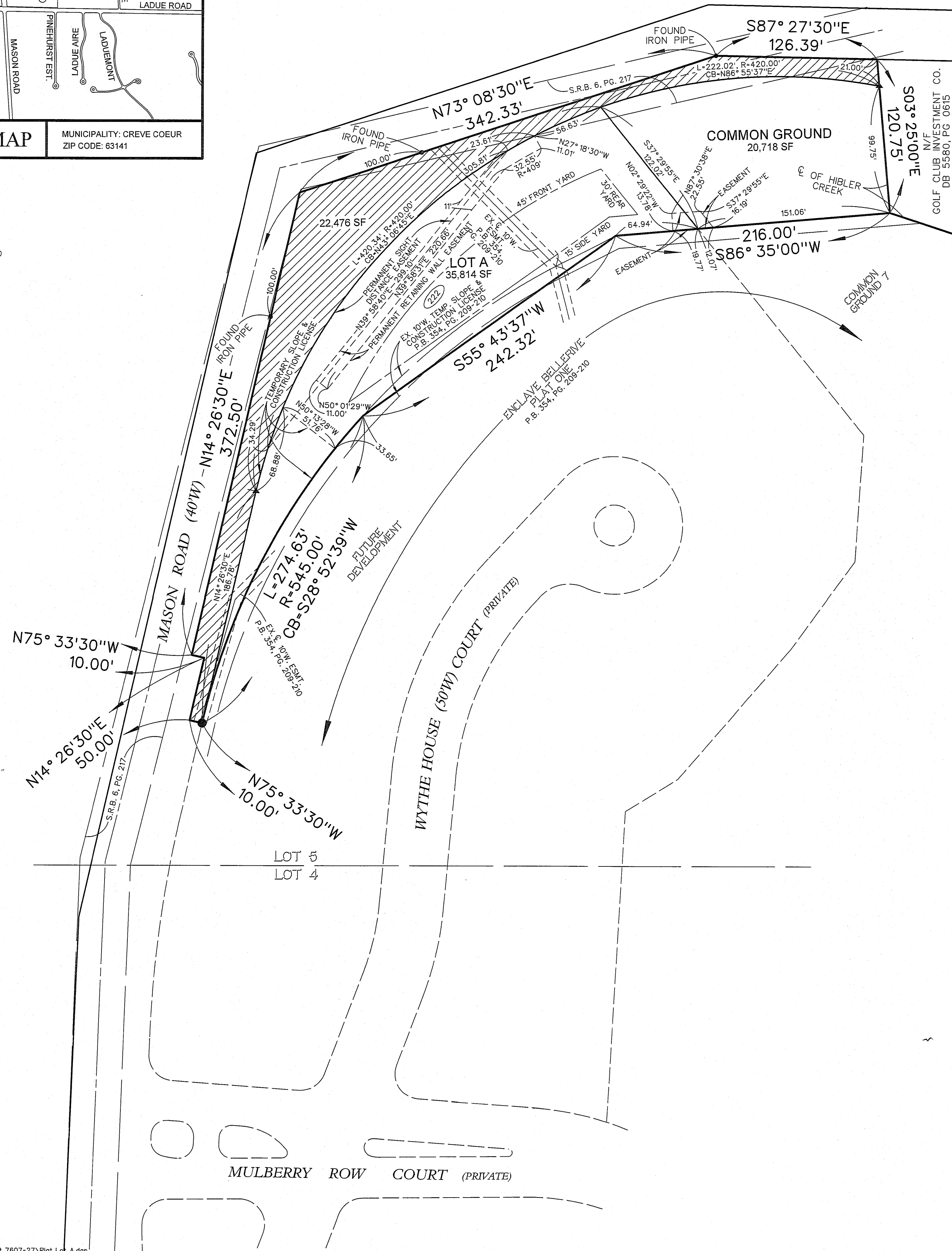
222 NORTH MASON ROAD

A TRACT OF LAND BEING PART OF LOT 5 OF THE
SUBDIVISION IN PARTITION OF THE WM. HOGG ESTATE
AND PART OF U.S. SURVEY 730, TOWNSHIP 45 NORTH, RANGE 5 EAST
CITY OF CREVE COEUR, ST. LOUIS COUNTY, MISSOURI



LEGEND

SRB SURVEYOR'S RECORD BOOK
(ST. LOUIS CITY RECORDS)
▲ PERMANENT MONUMENT
(BRASS COATED STEEL ROD
W/ BRAS CAP)
● IRON PIPE (FOUND OR SET)
□ FOUND STONE
+ FOUND CROSS
(123) ADDRESS



This is to certify that we have, during the month of April, 2013, by order of The Enclave at Bellerive, L.L.C., made a Property Boundary Survey and prepared a Subdivision Plat of "A tract of land being part of Lot 5 of the Subdivision in Partition of the Wm. Hogg Estate, according to the plat accompanying the Commissioner's Report recorded in Deed Book 409, Page 81 and Survey Record Book 6, Page 217 of the St. Louis City (former County) Records and part of U.S. Survey 730, Township 45 North, Range 5 East, in the City of Creve Coeur, St. Louis County, Missouri." This Survey was made in accordance with the "Missouri Minimum Standards for Property Boundary Surveys", as established by the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors and Landscape Architects, and meets the accuracy requirements of an Urban Property Survey, as defined therein, and the results are as shown on this plat.

Volz Incorporated

May 30, 2013

Date

Richard W. Norvell
Richard W. Norvell, P.L.S.
Professional Land Surveyor
MO. PLS No. 1437
rwnorvell@volzinc.com

We the undersigned owners of the tracts of land hereon platted and further described in the foregoing Surveyor's Certificate, have caused the same to be surveyed and subdivided in the manner shown on this plat, which Subdivision shall be subject to any easements, restrictions or covenants of record and hereafter be known as "222 North Mason Road". The dedication strip along Mason Road, variable width, which for better identification is shown hatched hereon, is hereby dedicated to St. Louis County for public use forever.

All easements shown on this plat, unless designated for other specific purposes, are hereby dedicated to the City of Creve Coeur, Missouri, Missouri American Water Company, Laclede Gas Company, AmerenUE, AT&T, the Metropolitan St. Louis Sewer District, and the relevant cable television company, their successors and assigns as their interests may appear for the purpose of improving, constructing, replacing, maintaining, and repairing of public utilities, sewer or sewers, storm water improvements and drainage facilities, with the right of temporary use of adjacent ground not occupied by improvements, for the excavation and storage of materials during installation, repair, or replacement of said utilities, sewer or sewers, storm water improvements and drainage facilities. The building setback lines shown hereon are also hereby established.

The Permanent Site Distance Easement as shown on this plat is hereby conveyed to St. Louis County to ensure and protect the clear and unobstructed view of motorists on and entering the adjacent roadways. No part of said easement shall be built on, regraded or changed in any manner nor shall any structure or planting be permitted within said easement unless expressly approved by the St. Louis County Director of Highways and Traffic. Any structure or planting approved by the Director shall be maintained by the Trustees of Enclave Bellerive, their successors or assigns.

The Permanent Retaining Wall Easement is hereby granted to St. Louis County, Missouri to construct, repair and maintain the retaining wall and appurtenances.

The Temporary Slope Construction License as shown on this plat is hereby conveyed to St. Louis County for the purpose of making cuts, fills and sloping embankment, constructing drives, sidewalks, temporary roadways and overhead utilities if any, provide working room and implementing any and all other construction items until such time as the proposed roadway may be completed and accepted by St. Louis County. Upon the acceptance of said improvements by St. Louis County or its assigns, this license shall terminate.

Two permanent monuments (indicated as ▲) for each block created and semi permanent monuments (indicated as ●) at all lot corners will be set, with the exception that the front lot corners may be monumented by notches or crosses cut in concrete paving on the prolongation of the lot line within twelve (12) months after the recording of this subdivision plat, in accordance with 10 CSR 30-2.090 of the Missouri Department of Natural Resources and 4 CSR 30-16.090 of the Missouri Department of Economic Development.

This Subdivision is subject to the conditions and restrictions filed in conjunction with this plat and recorded this _____ day of _____, 2013, as Daily Number _____ of the St. Louis County Records.

It is hereby certified that all existing easements are shown or noted on this plat as of the time and date of the recording of this plat. All taxes due and payable against this property have been paid in full.

IN WITNESS WHEREOF, we have hereunto set our hand, this _____ day of _____, 2013.

The Enclave at Bellerive, L.L.C.

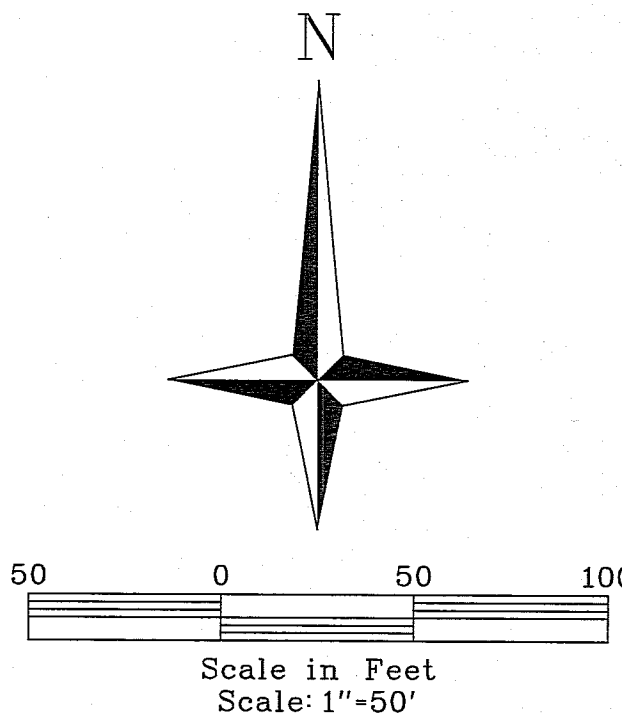
By: Christopher Vatterott, Managing Member

STATE OF MISSOURI)
COUNTY OF ST. LOUIS)

On this _____ day of _____, 2013, before me appeared Christopher Vatterott, to me personally known, who being by me duly sworn, did say that he is the Managing Member of The Enclave at Bellerive, L.L.C., a Missouri Corporation duly organized and existing under the laws of the State of Missouri, and that the seal affixed to the foregoing instrument is the Corporate Seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation, by authority of its Board of Directors and he further acknowledges said instrument to be the free act and deed of said Corporation.

IN TESTIMONY WHEREOF, I have herewith set my hand and affixed by notarial seal the day and year above written.
My Commission expires _____

(Printed name of Notary Public) (Notary Public)



We the undersigned legal owners and holder of notes for _____, secured by Deed of Trust recorded in Deed Book _____, Page _____, of the St. Louis County Records, do hereby join in and approve the foregoing Subdivision, as shown on this Plat.

IN WITNESS WHEREOF, we have hereunto set our hand and affixed our corporate seal, this _____ day of _____, 2013.

Corporation

By: _____
(Corporate Officer)

(Printed name of Corporate Officer, Title)
STATE OF MISSOURI)
COUNTY OF ST. LOUIS)

On this _____ day of _____, 2013, before me appeared, _____, to me personally known, who being by me duly sworn, did say that (s)he is the _____ of _____, a Missouri Corporation duly organized and existing under the laws of the State of Missouri, and that the seal affixed to the foregoing instrument is the Corporate Seal of said Corporation and that said instrument was signed and sealed in behalf of said Corporation, by authority of its Board of Directors and (s)he further acknowledges said instrument to be the free act and deed of said Corporation.

IN TESTIMONY WHEREOF, I have herewith set my hand and affixed by notarial seal the day and year above written.

My Commission expires _____

(Printed name of Notary Public) (Notary Public)

It is hereby certified, that this Subdivision Plat was approved on the _____ day of _____, 2013 pursuant to the Subdivision Regulations of the City of Creve Coeur, Missouri, as outlined in said regulations in Section 410.140.C, Ordinance Number 5123.

Planning & Zoning Commission
City of Creve Coeur, Missouri

Chairman

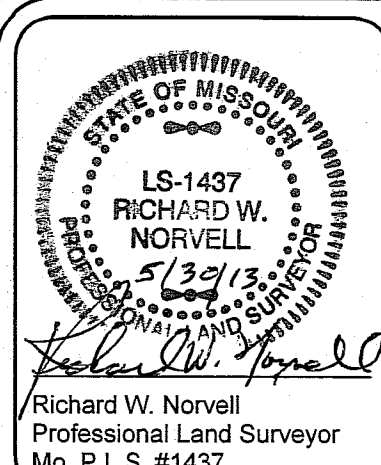
I, Deborah Ryan, City Clerk for and within the City of Creve Coeur, Missouri, do hereby certify that this Subdivision Plat is in complete compliance with Ordinance No. 1045 approved on the twenty-fifth day of July, 1983, as approved by the City Council of the City of Creve Coeur.

Deborah Ryan, City Clerk

General Notes:

- Bearing system adopted from Enclave Bellerive Plat One as recorded in Plat Book 354 Pages 209 and 210.
- Source of Title: A First American Title Insurance Company Commitment for Title Insurance Number NCS-46336-STLO, dated April 12, 2003. All Easements reported therein are shown hereon.

THIS PLAT CONTAINS 1.814 ACRES



VOLZ Incorporated
10849 Indian Head Ind'l. Blvd.
St. Louis, Missouri 63132
314.426.6212 main - 314.890.1250 fax
WWW.VOLZINC.COM

MISSOURI CORPORATE CERTIFICATES OF AUTHORITY:
NO. 000019 EXPIRES: DECEMBER 31, 2013 - LAND SURVEYING
NO. 000203 EXPIRES: DECEMBER 31, 2013 - ENGINEERING

222 N. MASON ROAD
CREVE COEUR, MO 63141
7607-27
Sheet 1 of 1

BILL NO. 5427

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ADOPTED 2012-2013 GENERAL AND ENTERPRISE FUNDS
BUDGETS OF THE CITY OF CREVE COEUR BY AUTHORIZING ADDITIONAL APPROPRIATIONS
AND UNAPPROPRIATIONS FROM OPERATING DEPARTMENTS

WHEREAS, REVENUES WERE ESTIMATED AND APPROPRIATIONS WERE AUTHORIZED IN THE ANNUAL CITY BUDGET ADOPTED ON JUNE 25, 2012 BY ORDINANCE NO. 5259 AND AMENDED BY ORDINANCE NO. 5292 APPROVED ON JANUARY 14, 2013 AND AMENDED AGAIN BY ORDINANCE NO 5301 APPROVED ON APRIL 22, 2013.

WHEREAS, IT IS IN THE INTEREST OF THE CITY OF CREVE COEUR TO AUTHORIZE ADDITIONAL APPROPRIATIONS TO PAY FOR UNBUDGETED AND UNANTICIPATED EXPENDITURES AND TO UNAPPROPRIATE ITEMS BUDGETED BUT NOT COMPLETED IN VARIOUS CATEGORIES AS PROVIDED IN THE CITY CHARTER AND THE CITY CODE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CREVE COEUR AS FOLLOWS:

SECTION 1. THAT THE ANNUAL OPERATING BUDGET FOR THE GENERAL AND ENTERPRISE FUNDS FOR THE 2012-2013 FISCAL YEAR AS ADOPTED, IS HEREBY AMENDED BY AUTHORIZING ADDITIONAL APPROPRIATIONS IN THE AMOUNT OF \$133,896 IN THE FOLLOWING DEPARTMENTS:

GENERAL FUND

CITY COUNCIL	\$	400
CITY CLERK		42
ADMINISTRATION		13,581
MIS		1,000
FINANCE		6,101
MUNICIPAL COURT		2,258
NON-DEPARTMENTAL		6,877
COMMUNITY SERVICES		1,052
MAINTENANCE		6,197
POLICE-ADMIN		2,973
POLICE-INVESTIGATION		8,529
POLICE-PATROL		29,789
PUBLIC WORKS-ADMIN		2,395
PUBLIC WORKS-STREETS		12,000
PUBLIC WORKS-HEALTH & WELFARE		2,800
PUBLIC WORKS - PARKS		22,773
PLANNING		4,666
BUILDING INSPECTIONS		7,169
TOTAL ADDITIONAL APPROPRIATIONS-GENERAL FUND	\$	130,602

ENTERPRISE FUND

ICE ARENA	\$	1,600
GOLF MAINTENANCE		798
PRO SHOP		896
TOTAL ADDITIONAL APPROPRIATIONS-CAPITAL FUND	\$	3,294

TOTAL ALL ADDITIONAL APPROPRIATIONS	\$	<u>133,896</u>
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SECTION 2. THAT THE ANNUAL OPERATING BUDGET FOR THE GENERAL AND ENTERPRISE FUNDS FOR THE 2012-2013 FISCAL YEAR AS ADOPTED, IS HEREBY AMENDED BY AUTHORIZING ADDITIONAL UNAPPROPRIATIONS IN THE AMOUNT OF \$362,674.

GENERAL FUND	
CITY COUNCIL	\$ 35,000
ADMINISTRATION	6,000
MIS	15,500
FINANCE	2,700
MUNICIPAL COURT	20,000
NON-DEPARTMENTAL	7,339
COMMUNITY SERVICES	2,500
MAINTENANCE	6,000
POLICE-ADMINISTRATION	18,138
POLICE-INVESTIGATION	30,650
POLICE-PATROL	46,503
PUBLIC WORKS-ADMIN	1,750
PUBLIC WORKS-STREETS	94,000
PUBLIC WORKS PARKS	24,899
PLANNING	20,000
BUILDING INSPECTIONS	8,000
TOTAL UNAPPROPRIATIONS-GENERAL FUND	<u>\$ 338,979</u>
ENTERPRISE FUND	
ICE ARENA	\$ 12,695
PRO SHOP	8,500
FOOD SERVICE	2,500
TOTAL UNAPPROPRIATIONS-ENTERPRISE FUND	<u>\$ 23,695</u>
TOTAL ALL ADDITIONAL UNAPPROPRIATIONS	<u><u>362,674</u></u>

SECTION 3. THE ANNUAL GENERAL FUND OPERATING BUDGET FOR FISCAL YEAR 2012-2013 AS ADOPTED, IS HEREBY AMENDED BY THE FOLLOWING INCREASES OR (DECREASES) IN BUDGETED REVENUES:

ACCOUNT	AMOUNT
ELECTRIC GROSS RECEIPTS	\$ (30,000)
WATER GROSS RECEIPTS	40,000
RETAIL SALES TAX	(40,000)
TOTAL GENERAL FUND REVENUES	<u>\$ (30,000)</u>

SECTION 4. THE ANNUAL ENTERPRISE FUND OPERATING BUDGET FOR FISCAL YEAR 2012-2013 AS ADOPTED IS HEREBY AMENDED BY THE FOLLOWING INCREASES OR (DECREASES) IN BUDGETED REVENUES:

ACCOUNT	
GREENS FEES	\$ (20,000)
TOTAL CAPITAL FUND REVENUES	<u>\$ (20,000)</u>

BILL NO. 5427

ORDINANCE NO. _____

SECTION 5. THE ANNUAL RETIREMENT FUND BUDGET FOR FISCAL YEAR 2012-2013 AS ADOPTED IS
HEREBY AMENDED BY THE FOLLOWING INCREASES OR (DECREASES) IN BUDGET REVENUES:

ACCOUNT		
	GAIN/LOSS ON INVESTMENTS	200,000
	TOTAL RETIREMENT FUND REVENUES	<u>\$ 200,000</u>

SECTION 6. THIS ORDINANCE SHALL BECOME EFFECTIVE PURSUANT TO PROVISIONS OF SECTION 3.11(G)
OF THE CHARTER.

ADOPTED THIS _____ DAY OF _____ 2012.

ROBERT HOFFMAN
PRESIDENT OF CITY COUNCIL

APPROVED THIS _____ DAY OF _____ 2012.

BARRY GLANTZ
MAYOR

ATTEST:

DEBORAH RYAN, MPCC
CITY CLERK



MEMORANDUM

DATE: June 6, 2013

TO: Mark Perkins, City Administrator

FROM: Daniel Smith, Director of Finance

SUBJECT: Budget Amendments

It is necessary throughout the year to adjust the budget. These changes are due to unanticipated expenditures or other factors that have changed the actual costs. Attached is a bill which proposes to amend the FY 2013 budget for the General, Enterprise and Retirement Funds.

In Summary the changes in appropriations are as follows:

General Fund Appropriations	130,602
General Fund Unappropriations	338,979
Enterprise Fund Appropriations	3,294
Enterprise Fund Unappropriations	23,695

Some of the major changes include:

General Fund Appropriations

1. Administration Additional monies are required primarily due to higher salary costs partially offset by lower health insurance costs.
2. Finance Additional monies are needed primarily for expenses relating to IT outsourcing.
3. Non-Departmental An increase is requested to cover unemployment expense which was higher than anticipated in the last quarter and an unanticipated increase in liability insurance expense including deductible. Both these costs were higher than anticipated in the budget.
4. Police-Patrol Additional funds are requested due to difference in manpower allocation than proposed in budget. Salaries are being reduced in Investigations to offset this.
5. Public Works-Streets More temp agency service was used. Partially due to vacancies within the department.
6. Public Works-Parks Increased expenditures in Building and Ground Maintenance were primarily the result of Tappmeyer House costs.
7. All Departments In addition pension contribution costs were higher than anticipated in the FY 2013 budget for all General Fund departments.

General Fund Unappropriations

1. City Council Savings primarily resulting from less legal expenses and travel than anticipated.
2. MIS Saving resulting from less purchases and reduced cost of hardware and software purchased in FY 2013. Also, salary costs were reduced due to outsourcing.
3. Municipal Court Reduction in ATS fees as a result of reduced photo enforcement revenues.
4. Police-Admin Reduction primarily resulting from less use of temp employees than anticipated.
5. Police-Investigations Unappropriations as a result of different manpower allocation than budgeted.
6. Police-Patrol Unappropriations as a result of reduced workers' compensation and overtime. Also gasoline expenditure was over-budgeted for FY 2013.
7. Public Works-Streets Unappropriations primarily resulting from:
 - a. Reduced salary cost due to vacancies.
 - b. Reduced overtime costs.
 - c. Elimination of hauling and leaf disposal charge
 - d. Less snow removal costs than anticipated.
8. Public Works-Parks Unappropriations primarily as a result of no temp salaries being charged to parks.
9. Planning Unappropriation of planning study budgeted in FY 2013 and not completed. Study was rebudgeted in FY 2014.

Enterprise Fund – Appropriations

Ice Arena – Increase appropriation for medical insurance coverage which was different due to new employee.

Enterprise Fund – Unappropriations

1. Ice Arena Unappropriations due to less temp employee usage than anticipated and not as much pay-in-lieu of vacation as anticipated.
2. Pro Shop Less vehicle maintenance cost than anticipated as a result of leasing golf carts instead of owning.
3. Food Service Unappropriation as a result of less usage of temp employees than anticipated.

Revenue

In addition, staff is recommending changes in revenues for the General, Enterprise and Retirement Funds. These changes affect Electric Gross Receipts, Water Gross Receipts and Sales Tax in the General Fund. In the Enterprise Fund greens fees were reduced. For the Retirement Fund the gain on investments is proposed to change. The proposed change in gain on investments is an increase of \$200,000.

I would be pleased to answer any questions you may have.

PRELIMINARY BUDGET ADJUSTMENTS				
2013(3)				
ACCOUNT	ACCOUNT NUMBER	DESCRIPTION	AMOUNT	DEPT
GENERAL FUND REVENUES				
Electric Gross Receipts	01-00-00-4201	Electric Gross receipts less than anticipated	-30,000	
Water Gross Receipts	01-00-00-4204	Water Gross Receipts	40,000	
Retail Sales Tax	01-00-00-4301	Sales tax below expectations	-40,000	
TOTAL REVENUE ADJUSTMENTS			-30,000	
GENERAL FUND EXPENDITURES				
Salaries- Perm Employees- Council	01-11-12-5101	Extra salaries due to overlap for new Council Members	400	
Legal and Accounting Services-Council	01-11-12-6201	Less legal Cost than anticipated	-25000	
Travel and Conferences-Council	01-11-12-6265	Less travel Cost than anticipated	-10000	-34600
Pension-Clerk	01-11-13-5241	Slightly higher pension cost than anticipated	42	42
Salaries -Perm Employees- Administration	01-12-11-5101	Salaries higher than anticipated	10750	
Hospital and Medical Insurance-Administration	01-12-11-5230	New Employee did not carry City Insurance	-6000	
Pension-Administration	01-12-11-5241	Additional Pension Cost	2831	7581
Salaries Perm Emp-MIS	01-12-51-5101	Reduction in salaries due to outsourcing	-3500	
Overtime-MIS	01-12-51-5104	Additional overtime required due to IT issues	1000	
Computer software-MIS	01-12-51-7332	Software cost less than anticipated	-12000	-14500
Salaries-Perm Employee-Finance	01-13-11-5101	Slightly higher than anticipated	850	
Hospital and Medical Insurance-Finance	01-13-11-5230	New employee did not require coverage	-2700	
Pension-Finance	01-13-11-5241	Higher than anticipated Pension Cost	2251	
Professional and Technical services-Finance	01-13-11-6202	Increase due to outsourcing of IT	3000	3401
Hospital and Medical Insurance-Court	01-13-14-5230	Health Insurance Coverage changes	1250	
Pension-Court	01-13-14-5241	Higher than anticipated Pension Cost	1008	
Workers Compensation-Court	01-13-14-5243	Budget Error	-5000	
ATS Fees-Photo Enforcement-Court	01-13-14-6248	Reduced fees due to 70% restriction	(15,000)	(17,742)
Dental Insurance-Non-Departmental	01-13-15-5233	No Dental Coverage this year	(3,339)	
Unemployment Insurance- Non-Departmental	01-13-15-5244	Higher unemployment cost than anticipated	5,000	
Health Insurance Deductible Reimbursement	01-13-15-5246	Less Reimbursement than anticipated	(4,000)	
Liability Insurance-Non Departmental	01-13-15-6220	Deductible payments higher than anticipated	1,500	
Office Equipment-Non Departmental	01-13-15-9504	Unanticipated Equipment need	377	(462)
Vacation Pay-Community Services	01-14-11-5104	Unanticipated Vacation Pay	577	
Hospital Medical Insurance- Community Services	01-14-11-5230	Insurance higher than anticipated	475	
Technical and Professional services-Community Services	01-14-11-6202	Less instructors than anticipated	(2,500)	(1,448)
Pension-Maintenance	01-16-11-5241	Higher than anticipated Pension Cost	797	
Building and Grounds Maintnenace_ Maintenance	01-16-11-6212	More maintenance cost than anticipated	5,400	
Equipment-Maintenance	01-16-11-9503	Equipment purchase not needed	(6,000)	197
Salaries-Temp Employees-Police Admin	01-21-11-5102	Temps not needed as much as anticipated	(16,000)	
Pension-Police Admin	01-21-11-5241	Higher than anticipated Pension Cost	2,973	
Workers Compensation-Police Admin	01-21-11-5243	WC less than anticipated	(2,138)	(15,165)
Salaries-Perm Employees-Police Investigation	01-21-21-5101	Salaries less due to different allocation of manpower than Budgeted	(25,000)	
Longevity Pay-Police Investigation	01-21-21-5105	Longevity pay less due to different allocation than budgeted	(3,100)	
Hospital and Medical Insurance-Investigation	01-21-21-5230	Insurance more than Budgeted due to different manpower allocation	3,000	
Pension-Investigation	01-21-21-5241	Higher than anticipated Pension Cost	5,529	
Workers Compensation-Investigation	01-21-21-5243	WC less than anticipated	(2,550)	(22,121)
Salaries-Perm Employees-Patrol	01-21-22-5101	Salaries more due to different allocation of manpower than Budgeted	16,450	
Overtime-Patrol	01-21-22-5103	Less Overtime than anticipated	(12,000)	

Holiday Pay-Patrol	01-21-22-5108	More Holiday pay due to Officers leaving and different allocation of Manpower	2,100	
Pension-Patrol	01-21-22-5241	Higher than anticipated Pension Cost	11,239	
Workers Compensation-Patrol	01-21-22-5243	WC less than anticipated	(14,503)	
Gasoline and Propane- Patrol	01-21-22-7307	Overbudgeted Gasoline expenditures	(20,000)	(16,714)
Overtime-PW Admin	01-31-11-5103	Less OT needed than Budgeted	(1,750)	
Pension-PW Admin	01-31-11-5241	Higher than anticipated Pension Cost	2,395	645
Salaries Perm Employees-Streets	01-31-41-5101	Vacancies and retirements	(12,000)	
Overtime-Streets	01-31-41-5103	Less OT than anticipated	(11,000)	
Hospital and Medical Insurance-Streets	01-31-41-5230	Less cost due to vacancies and changes in Personnel	(4,000)	
Workers Compensation- Streets	01-31-41-5243	WC less than anticipated	(5,000)	
Technical and professional services-Streets	01-31-41-6202	Savings due to not hauling leaves	(40,000)	
Temp Services -Streets	01-31-41-6207	More Temp cost than anticipated	12,000	
Vehicle Maintenance-Streets	01-31-41-6210	Less Maintenance than anticipated	(7,000)	
Equipment Maintenance-Streets	01-31-41-6211	Less Maintenance than anticipated	(5,000)	
Snow removal Supplies-Streets	01-31-41-7310	Less snow removal cost than anticipated	(10,000)	(82,000)
Refuse Collections-Health and Welfare	01-31-42-6214	Refuse collection slightly higher than anticipated	2,800	2,800
Salaries-Perm-Parks	01-31-43-5101	Vacancies and replacements	(5,000)	
Salaries-Temp Employees-Parks	01-31-43-5102	Temp Salaries all charged to Streets	(16,899)	
Hospital and Medical Insurance -Parks	01-31-43-5230	Vacancies and replacements	(3,000)	
Pension-Parks	01-31-43-5241	Higher than anticipated Pension Cost	2,773	
Building and Grounds Maintenance-Parks	01-31-43-6212	Higher than anticipated primarily due to Tappmeyer House Maintenance	20,000	(2,126)
Hospital and Medical Insurance-Planning	01-32-11-5230	Medical Insurance higher than anticipated	4,200	
Pension-Planning	01-32-11-5241	Higher than anticipated Pension Cost	466	
Planning and Design Services-Planning	01-32-11-6204	Study not Done in FY 2013. Rebudgeted in 2014	(20,000)	(15,334)
Salaries- Temp Employees-Building Insp	01-32-61-5102	Cost slightly higher than expected	900	
Hospital and Medical Insurance-Building Insp.	01-32-61-5230	Insurance cost higher than expected	1,400	
Workers Compensation-Building Insp	01-32-61-5243	WC less than anticipated	(3,000)	
Pension-Building Insp	01-32-61-5241	Higher than anticipated Pension Cost	4,376	
Telephone-Building Admin	01-32-61-6253	Tablets not in use yet	(5,000)	
Office Equipment-Building Insp	01-32-61-9504	Additional equipment needed	493	(831)
TOTAL EXPENDITURE ADJUSTMENTS			-208377	-208377
ACCOUNT	NUMBER	DESCRIPTION	AMOUNT	
ENTERPRISE FUND-REVENUES				
Greens Fees	06-00-00-4500	Less than anticipated	-20000	
			0	
ENTERPRISE FUND-REVENUES-CONTINUED				
TOTAL ENTERPRISE FUND REVENUE ADJUSTMENTS			-20000	
ENTERPRISE FUND-EXPENDITURES				
Salaries-Temp Employee-Ice Arena	06-14-31-5102	Not as much Part-time help needed as anticipated	-10000	
Vacation Pay-Ice Arena	06-14-31-5104	Vacation Pay less than anticipated	-2695	
Hospital and Medical Insurance-Ice Arena	06-14-31-5230	Cost more than anticipated	1600	-11095
Salaries-Perm Employees-Maintenance	06-14-32-5101	Salaries slightly higher than anticipated	210	
Pension-Maintenance	06-14-32-5241	Higher than anticipated Pension Cost	588	798
Salaries-Perm Employees-Pro Shop	06-14-33-5101	Salaries slightly higher than anticipated	205	
Hospital and Medical Insurance- Pro Shop	06-14-33-5230	Cost more than anticipated	691	
Vehicle Maintenance-Pro Shop	06-14-33-6210	Less cost due to leasing of Golf carts	-8500	-7604
Salaries Temp Employees- Food Service	06-14-34-5102	Less PT help needed than anticipated	-2500	-2500
TOTAL ENTERPRISE FUND EXPENDITURE ADJUSTMENTS			-20401	-20401
CAPITAL FUND-REVENUES				

TOTAL CAPITAL FUND REVENUE ADJUSTMENTS					
CAPITAL FUND EXPENDITURE ADJUSTMENTS					
TOTAL RETIREMENT FUND EXPENDITURE ADJUSTMENTS					
TOTAL RETIREMENT REVENUE ADJUSTMENTS					
Gain/Loss on Investments	03-00-00-4709	Market has done better than anticipated	200,000	200,000	
RETIREMENT FUND REVENUES					
TOTAL CAPITAL FUND EXPENDITURE ADJUSTMENTS				0	
CAPITAL FUND EXPENDITURES					
GENERAL FUND ADDITIONAL APPROPRIATIONS				130,602	
GENERAL FUND UNAPPROPRIATIONS				(338,979)	
NET INCREASE/DECREASE IN GENERAL FUND APPROPRIATIONS				(208,377)	
ENTERPRISE FUND ADDITIONAL APPROPRIATIONS				3294	
ENTERPRISE FUND UNAPPROPRIATIONS				-23695	
NET INCREASE/DECREASE IN ENTERPRISE FUND APPROPRIATIONS				-20401	
CAPITAL FUND ADDITIONAL APPROPRIATIONS				0	
CAPITAL FUND UNAPPROPRIATIONS				0	
NET INCREASE/DECREASE IN CAPITAL FUND APPROPRIATIONS				0	
RETIREMENT FUND ADDITIONAL APPROPRIATIONS				0	
RETIREMENT FUND UNAPPROPRIATIONS				0	
NET INCREASE/DECREASE IN RETIREMENT FUND APPROPRIATIONS				0	
TOTAL ADDITIONAL APPROPRIATIONS ALL FUNDS				133,896	
TOTAL ADDITIONAL UNAPPROPRIATIONS ALL FUNDS				(362,674)	
GENERAL FUND ADDITIONAL REVENUES				40,000	
GENERAL FUND REDUCTION IN REVENUES				-70,000	
ENTERPRISE FUND ADDITIONAL REVENUES				-20000	
ENTERPRISE FUND REDUCTION IN REVENUES					
CAPITAL FUND ADDITIONAL REVENUES				0	
CAPITAL FUND REDUCTION IN REVENUES					
RETIREMENT FUND ADDITIONAL REVENUES				200,000	
RETIREMENT FUND REDUCTION IN REVENUES					
TOTAL INCREASE REVENUES ALL FUNDS				240,000	

														TOTAL REDUCTION IN REVENUES ALL FUNDS
														-90000

**AN ORDINANCE ADOPTING THE ANNUAL BUDGET OF THE CITY OF CREVE COEUR
FOR THE FISCAL YEAR 2014 COMMENCING JULY 1, 2013 AND
APPROPRIATING FUNDS PURSUANT THERETO**

WHEREAS, THE ANNUAL BUDGET FOR THE FISCAL YEAR COMMENCING ON JULY 1, 2013 HAS BEEN PROPOSED IN ACCORDANCE WITH STATE LAWS AND THE CITY CHARTER, AND

WHEREAS, THE FINANCE COMMITTEE REVIEWED AND RECOMMENDED APPROVAL OF THE PROPOSED BUDGET, AND

WHEREAS, A COPY OF THE PROPOSED BUDGET HAS BEEN AVAILABLE FOR PUBLIC INSPECTION AT THE CREVE COEUR GOVERNMENT CENTER AND A PUBLIC HEARING ON THE BUDGET WAS CONDUCTED ON JUNE 10, 2013, AT WHICH TIME ALL PERSONS WERE GIVEN AN OPPORTUNITY TO BE HEARD IN ACCORDANCE WITH CITY CHARTER REQUIREMENTS AND A NOTICE OF THE PUBLIC HEARING AND A GENERAL SUMMARY OF THE PROPOSED BUDGET WERE PUBLISHED IN THE ST. LOUIS COUNTIAN ON MAY 22, 2013, AND

WHEREAS, A COPY OF THIS ORDINANCE HAS BEEN MADE AVAILABLE FOR PUBLIC INSPECTION PRIOR TO ITS ADOPTION AND THIS BILL WAS READ BY TITLE IN AN OPEN MEETING TWO TIMES BEFORE FINAL PASSAGE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CREVE COEUR, MISSOURI AS FOLLOWS:

SECTION 1: THE ANNUAL BUDGET FOR THE CITY OF CREVE COEUR, MISSOURI FOR THE FISCAL YEAR COMMENCING ON JULY 1, 2013, A COPY OF WHICH IS ATTACHED HERETO AND MADE A PART HEREOF AS IF FULLY SET FORTH HEREIN, IS HEREBY ADOPTED. PURSUANT TO CHARTER SECTION 9.5(D), ADOPTION OF THE BUDGET CONSTITUTES APPROPRIATION OF THE AMOUNTS SPECIFIED THEREIN AS EXPENDITURES FROM THE FUNDS INDICATED. APPROPRIATION SHALL BE AS SPECIFIED BY ENUMERATED BUDGET LINE ITEM. FURTHER DETAIL WITHIN A BUDGET LINE ITEM EXPLAINS THE INTENDED USE OF FUNDS AS OF THE TIME OF BUDGET DEVELOPMENT, BUT SUCH USES MAY BE CHANGED AS AUTHORIZED BY THE CITY ADMINISTRATOR WITHIN THE LIMITS OF THE BUDGET LINE ITEM.

SECTION 2: THIS ORDINANCE SHALL BECOME EFFECTIVE PURSUANT TO THE PROVISIONS OF SECTION 3.11(G) OF THE CHARTER.

PASSED THIS DAY OF JUNE, 2013.

SCOTT SAUNDERS
PRESIDENT OF CITY COUNCIL

APPROVED THIS DAY OF JUNE, 2013.

BARRY GLANTZ
MAYOR

ATTEST:

DEBORAH RYAN, MPCC
CITY CLERK



city of CREVE COEUR

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MEMO TO PLANNING AND ZONING COMMISSION

Meeting Date: June 3, 2013

Subject: Public Art Transit Shelter Presentation

Request: Presentation of New Conceptual Design by Chris Fennell

Memo Prepared by: Whitney Kelly, AICP
City Planner

Attached: Christopher Fennell Revised Proposal “Window Tree Installation”

In November of 2010, the City issued a Call to Arts/Request for Qualifications for the fulfillment of the development approval agreement for the St. Luke’s Urgent Care and CVS Pharmacy that required the installation of a transit shelter. The shelter is to have a value as public art in addition to providing shelter to passengers as they wait. The design team of Marc Fornes & Volkan Alkanoglu and Chris Fennell were selected as the top two candidates from the selection process. Both candidates presented their original conceptual design during the Planning and Zoning Commission worksession on June 20, 2011, and the design team of Marc Fornes & Volkan Alkanoglu was selected as the top design.

However, after delays regarding the recording of easements, and after contract negotiation with the design team broke down, Chris Fennell was asked to develop a new concept for the site. Mr. Fennell will be presenting his new concept of a “Window Tree Installation”. Staff has received initial comments from Metro who suggested that the shelter should be flipped to allow waiting passengers a clear view of approaching buses and that it must comply with ADA access. Staff has also reviewed the proposed design with the Creve Coeur Arts Commission, who liked the new concept and was supportive of moving forward.

Please feel free to ask the Artist questions regarding the design, such as how it will be made, maintenance, liabilities, and overall concept. If the Commission Members accept the new design, Staff requests that the motion be made to approve the new concept, and proceed with a contract for final design and construction.

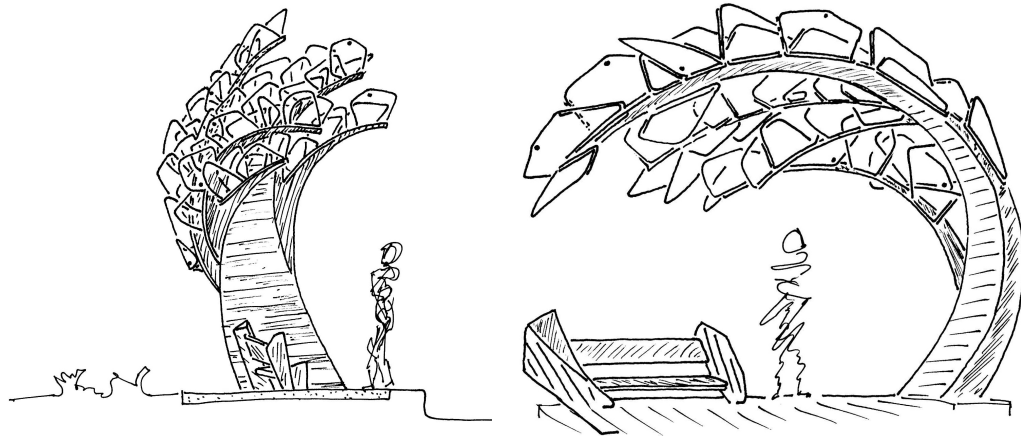
An example motion is:

“I move to approve the new design by Chris Fennell for the “Window Tree Installation” as presented on June 3, 2013, and ask Staff to enter into final contract negotiation for final design and construction.” (Conditions may be added by preceding motion).



Christopher Fennell
sculptor

Window Tree Installation



Christopher proposes to build a bus stop shelter in the shape of a tree out of planks with leaves made of car windows.

The bus stop shelter sits upon a road that used to be made of planks, so therefore why not build the trunk of the tree out of planks that start as a wide deck and progress up the tree, circling over the viewer, narrowing as if a road in forced perspective. Then fill out the canopy in leaves made of car windows.

The tree will rise up on the left of the bus stop shelter giving the patrons shelter from the spray of oncoming cars, it will rise over them, leaving enough room for a wheelchair. The trunk divides into two branches with a piece of plexi in between to act as a small roof for those standing next to the tree. On drier days the patrons can sit a bench on the far right side of the platform and gaze up into the 40 car windows that make up the canopy.

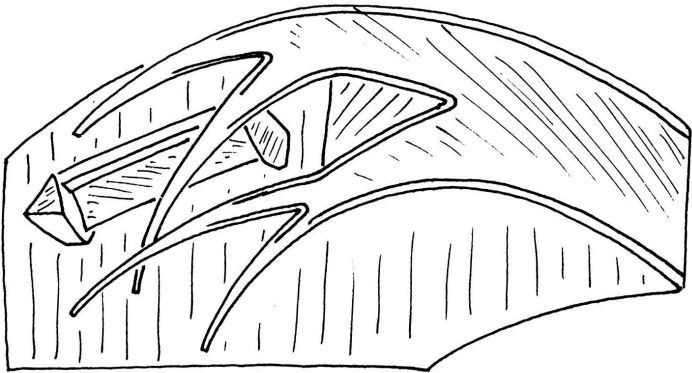
Each window will be rimmed in a thin channel of steel such that the edge of the window is protected from hail and stones. The base of the shelter will be a concrete pad that has a surface that resembles wood. It will be cast against wood planks leaving their impression in the pads surface. This pad will be even with the grade so that it can be easily cleaned. The tree itself is constructed of steel plates painted black and has an inside surface of tapering grey wood planks. The bench is made of the same materials grey wood on welded black steel.

The canopy will have four LED lights that illuminate the canopy and shelter at night.



Christopher Fennell
sculptor

Window Tree Budget



Top View
Structure only.

Budget

40 used car windows	\$2,000
Steel	\$2,240
Concrete	\$4,000
Paint	\$500
Structural Engineering Drawings	\$2,000
Consumables/ Fastners	\$860
Overhead	\$2,000
Labor to build and Install Sculpture	\$10,000
Transportation	\$1,200
Insurance	\$200
Artist Fee	\$2,000
Total	\$27,000

Time line

Structural Engineering Drawings	1 month
Gathering Windows	2 weeks
Time to build sculpture	2 months
Installation time	2 weeks
Total	4 months

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