

# CITY OF ASHLAND 815 EAST BROADWAY (SOUTHERN BOONE FIRE PROTECTION DISTRICT TRAINING FACILITY) ASHLAND, MO. 65010 BOARD OF ALDERMEN AGENDA TUESDAY, JANUARY 15, 2019 7:00 P.M.

Call regular meeting to order Pledge of Allegiance Roll Call CONSENT 1. Consideration of the 1-15-2019 agenda: **Action:** 2. Consideration of the 12-18-2018 meeting minutes: **Action: PUBLIC COMMENTS** 3. Anyone wishing to appear before the Board **APPOINTMENTS** 4. None **COUNCIL BILLS** 5. Council Bill No. 2019-001, an ordinance approving the preliminary plat for Liberty Point for James Fencing, LLC. First reading by title only. **Action:** 6. Council Bill No. 2019-002, an ordinance to change the zoning of a parcel of land from (C-G) General Commercial District to (R-3) High Density Residential for the City of Ashland, Missouri. First reading by title only. **Action:** 7. Council Bill No. 2019-003, an ordinance authorizing the Mayor to execute a notice of award to RC Contracting, LLC for the Main Street Sidewalk Project-TAP9901 (507). First reading by title only. **Action:** 8. Council Bill No. 2019-004, an ordinance to employ personnel as an Assistant City Administrator. First reading by title only. **Action:** 

#### **ORDINANCES**

9.	Ordinance No. 1235, an ordinance authorizing the Mayor to execute a notice of award to RC Contracting, LLC for the Main Street Sidewalk Project-TAP9901 (507).  Action:		
10.	RESOLUTIONS  A resolution adopting City of Ashland, Missouri Board of Aldermen meeting policies.		
	Action:		
11.	A resolution authorizing the Mayor to enter into an agreement for Architect Services with Porter, Berendzen & Associates. <b>Action:</b>		
	OTHER		
12.	None		
	DISCUSSION		
	Discussion of International Fire Code-Appendices A-H Discussion of Amending Chapter 10-Section 10.065 and Chapter 11-Section 11.190 <u>REPORTS</u>		
16. 17. 18. 19.	Mayor's Report City Administrator's Report/Police Chief City Treasurer's Report City Attorney's Report Board of Aldermen's Report Vote to adjourn the meeting		
any med of t	e City of Ashland wants to make certain our meeting is accessible to all citizens. If you require accommodations (signing, interpreter, translator, etc.) that we do not normally have at our etings, please let Darla Sapp, City Clerk know of your needs. (if possible 48 hours in advance the meeting)		
Pos	ted: 1-11-2019@ \\ \\ 5\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		
	City Hall and website: www.ashlandmo.us		

## TUESDAY, DECEMBER 18, 2018 BOARD OF ALDERMEN MINUTES 7:00 P.M. DRAFT COPY NOT APPROVED BY BOARD

Mayor Rhorer called the regular meeting to order at 7:00 p.m. on December 18, 2018 at 815 East Broadway, Ashland, Missouri.

Mayor Rhorer led in the pledge of allegiance.

Mayor Rhorer called the roll:

Ward One: Leslie Martin-here, Danny Clay-here
Ward Two: Jesse Bronson-here, Richard Sullivan-here

Ward Three: Rick Lewis-here, Jeff Sapp-here

Staff Present: Darla Sapp, City Clerk, Lyn Woolford, Police Chief/City Administrator, Jeffrey Kays, City Attorney, and Carrie Fischer, Administrative Assistant.

Mayor Rhorer presented the amended agenda of December 18, 2018 for consideration. Alderman Bronson made motion and seconded by Alderman Clay to approve the amended agenda as presented. Mayor Rhorer called for the vote. Motion carried.

Mayor Rhorer presented the minutes of December 04, 2018 Board meeting for consideration. Alderman Bronson made motion and seconded by Alderman Clay to approve the minutes as presented. Mayor Rhorer called for the vote. Motion carried.

Mayor Rhorer asked if anyone wished to appear before the Board to come to the podium and state their name and place of residence on any subject. No one wished to speak.

Mayor Rhorer presented Council Bill No. 2018-076 for consideration. Alderman Bronson made motion and seconded by Alderman Clay to take up Council Bill No. 2018-076, an ordinance approving the final plat for Forest Park Plat No. 1 First reading by title only. Mayor Rhorer called for questions or comments. Lyn Woolford reported we received approval from our engineer and the Planning and Zoning Commission recommended approval. He reported this is for Phase 1. Mayor Rhorer called for the vote. Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye, Alderman Sapp-aye, Alderman Sullivan-aye, Alderwoman Martin-abstained. Motion carried.

Mayor Rhorer presented Council Bill No. 2018-077 for consideration. Alderman Bronson made motion and seconded by Alderman Clay to take up Council Bill No. 2018-077, an ordinance approving the final minor plat for West Oaks Estate. First reading by title only. Mayor Rhorer called for questions or comments. Lyn Woolford reported this is approximately 20 acres on the backside of West Oaks Subdivision. He stated they want to split the tract into two different pieces of property. Mayor Rhorer called for the vote. Alderman Sapp-aye, Alderman Sullivan-aye, Alderwoman Martin-aye, Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye. Motion carried.

Mayor Rhorer presented Council Bill No. 2018-078 for consideration. Alderman Bronson made motion and seconded by Alderman Clay to take up Council Bill No. 2018-078, an ordinance authorizing the sale of real estate owned by the City of Ashland, a Municipal Corporation, to Winscott Construction and Excavating, Inc. located off of Redbud Lane. First reading by title only. Mayor Rhorer called for questions or comments. Lyn Woolford reported this contract is for full asking price with a contingency of the City getting this rezoned to R-3. He stated this rezoning is on the next Planning and Zoning

Commission agenda for consideration. Alderman Lewis questioned the difference between R-2 and R-3 zoning. Lyn Woolford, City Administrator reported it is more dense development. Mayor Rhorer reported there is a lot of old infrastructure in this lot that will need to be removed. Alderwoman Martin questioned what would happen to the recycling program we currently have. Lyn Woolford reported the plans are to move it to the new water department site by the primary school. Alderman Sapp stated the zoning requested is not a bad fit since there is commercial and residential zoning around it. Mayor Rhorer called for the vote. Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye, Alderwoman Martin-aye, Alderman Sullivan-aye, Alderman Sapp-aye. Motion carried.

Mayor Rhorer presented Ordinance No. 1232 for consideration. Alderman Bronson made motion and seconded by Alderman Clay to take up Ordinance No. 1232, an ordinance approving the final plat for Forest Park Plat No. 1. Mayor Rhorer called for questions or comments. Mayor Rhorer called for the vote. Alderman Sapp-aye, Alderman Sullivan-aye, Alderwoman Martin-aye, Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye. Motion carried.

Mayor Rhorer presented Ordinance No. 1233 for consideration. Alderman Bronson made motion and seconded by Alderman Clay to take up Ordinance No. 1233, an ordinance approving the final minor plat for West Oaks Estate. Lyn Woolford reported this is on the west edge of West Oaks Subdivision. Mayor Rhorer called for questions or comments. Mayor Rhorer called for the vote. Alderman Sapp-aye, Alderman Sullivan-aye, Alderwoman Martin-aye, Alderman Lewis-aye, Alderman Clay-aye, Alderman Bronson-aye. Motion carried.

Mayor Rhorer presented Ordinance No. 1234 for consideration. Alderman Bronson made motion and seconded by Alderman Clay to take up Ordinance No. 1234, an ordinance authorizing the sale of real estate owned by the City of Ashland, a Municipal Corporation to Winscott Construction and Excavating, Inc. located off of Redbud Lane. Mayor Rhorer called for questions or comments. Mayor Rhorer called for the vote. Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye, Alderwoman Martin-aye, Alderman Sullivan-aye, Alderman Sapp-aye. Motion carried.

Mayor Rhorer presented a resolution authorizing a payroll adjustment for the City Treasurer. Alderman Bronson made motion and seconded by Alderman Clay to consider a resolution authorizing a payroll adjustment for the City Treasurer. Mayor Rhorer called for questions or comments. Mayor Rhorer called for the vote. Alderman Sapp-aye, Alderman Sullivan-aye, Alderwoman Martin-abstained, Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye. Motion carried.

Mayor Rhorer presented a resolution of intent to award the contract to RC Contracting LLC for the Main Street Sidewalk improvements. Alderman Bronson made motion and seconded by Alderman Clay to take up for consideration a resolution of intent to award the contract to RC Contracting LLC for the Main Street Sidewalk improvements. Mayor Rhorer called for questions or comments. Lyn Woolford reported RC Contracting LLC is the lowest bidder and we are waiting on approval from MoDot. Mayor Rhorer called for the vote. Alderwoman Martin-aye, Alderman Sullivan-aye, Alderman Sapp-aye, Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye. Motion carried.

Mayor Rhorer presented a resolution authorizing the selection of an architectural firm for the design of a new City Hall and authorizing the City Administrator to negotiate a contract. Alderman Bronson made motion and seconded by Alderman Clay to take up for consideration a resolution authorizing the selection of an architectural firm for the design of a new City Hall and authorizing the City Administrator to negotiate a contract. Mayor Rhorer called for questions or comments. Lyn Woolford reported that Alderman Lewis and Alderman Sapp scored the six architectural firm submissions. He stated that Alderman Lewis was in agreement with the staff recommendation and Alderman Sapp was almost in agreement with the staff. Alderman Lewis stated the top two were neck to neck and he gave preference to

the local firm. He stated it looked like they put together a good product and it impressed him with the two buildings they have already done in Ashland. Alderman Sapp explained Porter, Berendzen & Associates was his third selection. He stated all three are well qualified. The Board discussed this. Mayor Rhorer called for the vote. Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye, Alderwoman Martin-aye, Alderman Sullivan-aye, Alderman Sapp-aye. Motion carried.

Mayor Rhorer presented a resolution authorizing the disposal of surplus city property. Alderman Bronson made motion and seconded by Alderman Clay to take up a resolution authorizing the disposal of surplus city property. Mayor Rhorer called for questions or comments. Lyn Woolford reported that there are surplus chairs, shelving and miscellaneous items that we will not be using in the new building. He informed the Board the conference room has been gutted and they will be raising the floor. He stated hopefully this will be a one-day event so we can get everything moved back. Mayor Rhorer called for the vote. Alderman Sapp-aye, Alderman Sullivan-aye, Alderwoman Martin-aye, Alderman Bronson-aye, Alderman Lewis-aye, Alderman Clay-aye. Motion carried.

Mayor Rhorer stated the next item on the agenda is establishing meeting room policies. He reported there is a draft policy in your packet. He stated that it looks reasonable and did not think we would use it unless we have a heck of a crowd. He stated he thinks it is a good policy to have on the books. Alderman Bronson stated he likes the policy and he knows the Mayor is doing a great job moving things along in the meeting but he stated that Mayor Rhorer is not always going to be Mayor. He stated you never know what topics and issues are going to arise. Mayor Rhorer stated he would place this on the next agenda. The Board discussed making it a five-minute limit and allowing additional time at the Board's discretion.

Mayor Rhorer presented the acceptance of resignation from Cindy Wills from the Parks and Recreation Board. Alderman Bronson made motion and seconded by Alderman Clay to accept the resignation from Cindy Wills. Alderman Bronson stated that Cindy did a good job but has some health issues. He thanked Cindy Wills for her time on the Park Board. Mayor Rhorer called for the vote. Alderman Sapp-aye, Alderman Sullivan-aye, Alderwoman Martin-aye, Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye. Motion carried.

Mayor Rhorer presented under discussion the agreement with the Ashland Optimist Club Pool. Mayor Rhorer stated a copy of the contract was included in the packet. He recommended a couple of amendments. 1.) Remove the automatic renewal. 2.) The City fills the pool through a meter so it does not count on our water loss report. He stated it would then be up to the Board if they wished to write that off. The Board discussed this and using a temporary meter to account for the amount of water used to fill the pool. They also discussed including the water to fill the pool as part of the up to \$3,000.00 as is in the contract. Mayor Rhorer and Lyn Woolford, City Administrator stated we have a lot of City projects and can't fund everybody. Alderman Lewis questioned how far out the Optimist Club budget for? Carrie Fischer, Administrative Assistant stated the Ashland Optimist does not pre-plan a budget for the pool. Lyn Woolford gave an update on the amounts paid to the Ashland Optimist Club for the pool.

#### Mayor's Report:

Mayor Rhorer commented on how great the Christmas Parade was with the tractors. He stated it was a great event. He informed the Board if they did not notice the City Hall and new police building are being torn up and under remodeling.

#### City Administrator/Police Chief Report:

Lyn Woolford, City Administrator reminded the Board of the MoDot public meeting to discuss the proposed upgrades for Broadway on Thursday from 4:00 to 6:00 p.m. at the middle school. He stated the main purpose is to get public input. He stated they are trying to decide to close the whole road or do one side at a time. He explained they are tearing out the roadway to the base and redoing the parking areas

along Broadway. Lyn Woolford stated one issue would be parking and access to the businesses on Broadway. He stated since we have a contract on the recycling lot we may or may not be able to use that for parking. He stated the construction is to begin in May or June of next year.

Lyn Woolford informed the Board that Friday is the staff Christmas luncheon at the Masonic Lodge from noon to 1:00 p.m. He also reminded them of the government official's breakfast at the middle school at 7:30 a.m.

Lyn Woolford reported we would be selling three lots that are in excess of the City needs, located by the sewer plant. He stated he is unsure why the City bought them unless it was for a buffer between the residential and sewer plant.

He reported DNR came and conducted their quarterly inspection on Monday for the construction site and no issues were found.

Russell Gerling with Alliance Water Resources stated the Lakeview Estates pump station is still having issues and they are working on it.

City Attorney report:

Jeffrey Kays did not have a report.

Board of Aldermen's Reports:

Alderman Bronson reported he attended the Park Board meeting this past Monday and they elected Tracy Banning as President and Ernie Wren as Vice Chairman. He informed the Board he attended the Southern Boone Fire Protection District meeting and they discussed the issues with the Potterfield development and differences in the fire code. He stated they discussed options going forward. Alderman Bronson stated he would like for us to consider adopting the same codes. Alderman Bronson stated the Fire District Board asked that the City not move the tables around anymore because they are finding broken pieces of the table.

Alderman Sapp informed the Board of a Missouri Municipal League meeting January 16, 2019 at 5:00 or 5:30 at the City of Columbia Riechmann Indoor Pavilion. He stated the main speaker is Caleb Rowden.

Alderman Bronson made motion and seconded by Alderman Clay to go into executive session pursuant to Chapter 610.021 (1) legal actions (2) real estate (3) Personnel matters with a ten-minute break. Mayor Rhorer called for the vote. Alderman Lewis-aye, Alderman Bronson-aye, Alderman Clay-aye, Alderwan Martin-aye, Alderman Sullivan-aye, Alderman Sapp-aye. Motion carried.

Mayor Rhorer reported we are back in open session with no reportable action taken.

Alderman Bronson made motion and seconded by Alderman Lewis to adjourn the meeting. Mayor Rhorer called for the vote. Alderman Sapp-aye, Alderman Sullivan-aye, Alderwan Martin-aye, Alderman Clay-aye, Alderman Lewis-aye, Alderman Bronson-aye. Motion carried.

Darla Sapp, City Clerk

Gene Rhorer, Mayor

#### **MEMORANDUM**

DATE: January 9, 2019

TO: Honorable Mayor and Board of Aldermen

FROM: Planning and Zoning Commission

RE: Recommendation from the Planning and Zoning Commission

1. The Planning and Zoning Commission recommends the approval of the Preliminary Plat of Liberty Point, for James Fencing LLC, on Parcel ID # 24-502-00-00-012.00 01, to the City of Ashland Board of Aldermen.

Megan Young Administrative Assistant

## AN ORDINANCE APPROVING THE PRELIMINARY PLAT FOR LIBERTY POINT FOR JAMES FENCING LLC.

HEREAS, a preliminary plat for development of a subdivision was submitted to the City of shland; and
HEREAS, the staff has reviewed the Preliminary Plat and recommends its approval; and
HEREAS, The Planning and Zoning Commission has reviewed the preliminary plat for berty Point and recommended the approval of the preliminary plat for Liberty Point at their eeting on January 08, 2019;
E IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF ASHLAND, ISSOURI AS FOLLOWS:
ction 1. The Board of Aldermen has reviewed the preliminary plat and has determined that informs to the long term land use strategy adopted by the City as part of its comprehensive an.
ction 2. The Board of Aldermen approves the preliminary plat for Liberty Point.
ction 3. This ordinance shall be in full force and effect after its passage and approval.
ated this, 2019.
Gene Rhorer, Mayor test:
arla Sapp, City Clerk
ertified as to correct form:
ffrey Kays, City Attorney

#### **MEMORANDUM**

DATE: January 9, 2019

TO: Honorable Mayor and Board of Aldermen

FROM: Planning and Zoning Commission

RE: Recommendation from the Planning and Zoning Commission

1. The Planning and Zoning Commission does not recommend the approval of the requested rezoning from C-G, Commercial General District, to R-3, High Density Residential District, of property at the corner of Bass St. & Redbud Ln. to the City of Ashland Board of Aldermen.

Megan Young Administrative Assistant

Jeffrey Kays, City Attorney

## AN ORDINANCE TO CHANGE THE ZONING OF A PARCEL OF LAND FROM (C-G) GENERAL COMMERCIAL DISTRICT TO (R-3) HIGH DENSITY RESIDENTIAL

WHEREAS, Public Notice of such was given as prescribed by Missouri State Statute 89.050, and a public hearing was held on Tuesday, January 08, 2019; and

WHEREAS, the Planning and Zoning Commission has reviewed the pertinent information and received comment from adjacent residents and has **not** agreed to recommend to the Board of Aldermen to approve the rezoning from (C-G) General Commercial to (R-3) High Density Residential; and

WHEREAS, the Board of Aldermen of the City of Ashland, Missouri has reviewed the request as submitted and has elected to rezone the property described in Section 1 from (C-G) General Commercial District to (R-3) High Density Residential; and

THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF ASHLAND, MISSOURI AS FOLLOWS:

Section 1. The zoning is hereby amended from the present (C-G) General Commercial District to (R-3) High Density Residential for the following described property:

Lots Nine (9), Ten (10) and Eleven (11) and West 10' of Vacated Bass Street in Block One of Gays Addition Block 1 to the Town of Ashland, Boone County, Missouri, as show on the recorded plat in Book 38, Page 89, Records of Boone County, Missouri. (Parcel Number 24-220-00-02-024.00 01)

Section 2. The City hereby finds and declares that the property described in Section 1 hereof is at the present particularly suitable for the purposes and uses of (R-3) High Density Residential and in conformity with the existing uses and value of the immediately surrounding properties.

#### ORDINANCE NO.

## AN ORDINANCE AUTHORIZING THE MAYOR TO EXECUTE A NOTICE OF AWARD TO RC CONTRACTING LLC FOR THE MAIN STREET SIDEWALK PROJECT TAP9901(507)

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF ASHLAND, MISSOURI AS FOLLOWS:

Section 1. The Board of Aldermen hereby, authorizes the Mayor to execute a notice of award to RC Contracting LLC for the Main Street Sidewalk Project TAP 9901(507).

Section 2. The terms of shall be as set forth in the attached Notice of Award, which by this reference is incorporated herein as if more fully and completely set out.

Section 3. This ordinance shall be in full force and effect from and after its passage and approval.

Dated this \_\_\_\_\_\_, 2019.

	Gene Rhorer, Mayor
Attest:	
Darla Sapp, City Clerk	
Certified as to correct form:	
Jeffrey Kays, City Attorney	

CITY OF ASHLAND 492-004

#### SECTION 00510 NOTICE OF AWARD

TO: RC Contracting LLC

29566 Inspiration Point Rocky Mount MO 65072

PROJECT Description: Main Street Sidewalk Project TAP9901(507)

The Owner has considered the Proposal submitted by you for the above-described WORK in response to its Advertisement for Bids dated October 18, 2018, and Information for Bidders.

You are hereby notified that your Proposal has been accepted for items in the amount of \$283,856.31.

You are required by the Information for Bidders to execute the Contract and furnish the required Contractor's Construction Contract Performance-Payment Bond, and certificates of insurance within <u>ten (10)</u> calendar days from the date of this Notice to you.

If you fail to execute said Contract and to furnish said Bonds within <u>ten (10)</u> days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Proposal as abandoned and as a forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

Dated this	day of	, 20	
		CITY OF ASHLAND Owner	
		Ву	
		TitleMayor	
ACCEPTANCE OF NOTICE			
	Receipt of the above Notice of Award is hereby acknowledged		
Ву		,	
this the	day of	, 20	
Ву		Title	

#### AN ORDINANCE TO EMPLOY PERSONNEL AS AN ASSISTANT CITY ADMINISTRATOR

WHEREAS, Article II Section 2.100 of the Ashland Municipal Code authorizes the Mayor and the Board of Alderman to employ personnel as may be deemed necessary; and

WHEREAS, the continued and sustained growth of the City of Ashland has created conditions such that the Office of the City Administrator and the City Staff require additional human resources to accomplish its duties; and

WHEREAS, The Board finds that it is necessary to employ and create the position of "Assistant City Administrator" in order to provide the high level of service required for the proper administration of government, to provide services to the citizens of the City of Ashland, and control growth and development in accordance with the City's Comprehensive Plan; and

THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF ASHLAND, MISSOURI AS FOLLOWS:

Section 1. The City Administrator is authorized and directed to update and amend the City of Ashland Personnel Manual to include the position of "Assistant City Administrator".

Section 2. The City Administrator is authorized to take action necessary to seek qualified candidates and fill the position of Assistant City Administrator.

Section 3. The Assistant City Administrator shall provide direction to and supervision of the functions and activities of departments designated by the City Administrator; represent the City Administrator at various meetings and serve as the City Administrator in his absence; work closely with the Mayor and City Board of Alderman members, the City Administrator and department directors in planning, organizing, and implementing programs for municipal operations; and work closely with the City Administrator in the coordination and administration of day-to-day operations of the City.

Dated this day of	2019.	
		Gene Rhorer, Mayor
Attest:		
Darla Sapp, City Clerk		
Certified to correct form:		
City Attorney	-	

day of

Dated this

### AN ORDINANCE AUTHORIZING THE MAYOR TO EXECUTE A NOTICE OF AWARD TO RC CONTRACTING LLC FOR THE MAIN STREET SIDEWALK PROJECT TAP9901(507)

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF ASHLAND, MISSOURI AS FOLLOWS:

Section 1. The Board of Aldermen hereby, authorizes the Mayor to execute a notice of award to RC Contracting LLC for the Main Street Sidewalk Project TAP 9901(507).

Section 2. The terms of shall be as set forth in the attached Notice of Award, which by this reference is incorporated herein as if more fully and completely set out.

. 2019.

Section 3. This ordinance shall be in full force and effect from and after its passage and approval.

	G D1 M
	Gene Rhorer, Mayor
Attest:	
Attest.	
Darla Sapp, City Clerk	
117	
Certified as to correct form:	
I-CC	
Jeffrey Kays, City Attorney	

A RESOLUTION ADOPTING CITY OF ASHLAND, MO. BOARD OF ALDERMEN MEETING POLICIES

WHEREAS, The City of Ashland Board of Aldermen felt the need to adopt a meeting room policy for the Board of Aldermen meetings.

THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF ASHLAND, MISSOURI AS FOLLOWS:

Section 1. The Board of Aldermen approves the following policy.

#### **Public Comments**

If you would like to make a scheduled comment at the beginning of a Board of Aldermen Meeting under Public Appearances. You can submit your request to the City Clerk located at 109 East Broadway or call at 573-657-2091 by the Wednesday prior to the meeting date that you wish to speak at. You will be given up to 5 minutes to address the Board of Aldermen.

Approximately thirty minutes maximum will be designated for the Scheduled Public Comment section of the Board of Aldermen agenda. Topics for public comment will be scheduled on a first come first served basis. If you are attending the meeting for any reason or for an item on the agenda you will be given a maximum of 5 minutes to address the Board of Aldermen as determined by the Mayor. This is the only public speaking portion of the meeting.

#### **Special Accommodations & Interpreter Service**

Members of the public may attend any open meeting. For requests for accommodations related to disability, please call 573-657-2091. In order to assist staff in making the appropriate arrangements for your accommodation, please make your request as far in advance of the posted meeting date as possible.

Section 2. This resolution shall be in full force and effect from and after its passage and

approval.			
Passed this	day of	, 2019.	
			Gene Rhorer, Mayor
Attest:			
Darla Sapp, City Clerk			

## A RESOLUTION AUTHORIZING THE MAYOR TO ENTER INTO AN AGREEMENT FOR ARCHITECT SERVICES WITH PORTER, BERENDZEN & ASSOCIATES, P.C.

WHEREAS, Th	ne City of Ashland reques	ted qualifications and proposal's for Architect services for the New
•		the qualifications from six firms and recommended the City Porter, Berendzen & Associates, P.C.
•	•	s negotiated a contract and has recommended the City of Ashland rvices with Porter, Berendzen & Associates, P.C.
THEREFORE, I MISSOURI AS		THE BOARD OF ALDERMEN OF THE CITY OF ASHLAND,
		n authorizes the Mayor to execute the agreement with Porter, rvices for the New City Hall.
	•	f Aldermen has agreed to the terms as set forth in the attached corporated here, as if more fully and completely set out as Exhibit
SECTION 3. Th	nis resolution shall be in t	full force and effect from and after its passage and approval.
Passed this	day of	, 2019.
		Gene Rhorer, Mayor
Attest:		
Darla Sapp, City	y Clerk	



#### Standard Form of Agreement Between Owner and Architect

AGREEMENT made as of the day of January in the year 2019 (In words, indicate day, month and year.)

**BETWEEN** the Architect's client identified as the Owner: (Name, legal status, address and other information)

The City of Ashland
109 E. Broadway
Ashland, Missouri 65010

and the Architect:

(Name, legal status, address and other information)

Porter, Berendzen & Associates, P.C. 305 E. Broadway, Suite A P.O. Box 446 Ashland, Missouri 65010 Telephone Number: 573-657-2022

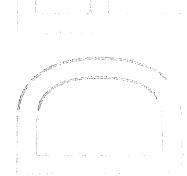
for the following Project: (Name, location and detailed description)

New City Hall
Ashland, Missouri

New City Hall located on new site to include, but not be limited to, customer lobby, offices, restrooms, conference room and stairwell.

The Owner and Architect agree as follows.

This document has important legal consequences.
Consultation with an attorney is encouraged with respect to its completion or modification.



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#### **TABLE OF ARTICLES**

- 1 INITIAL INFORMATION
- 2 ARCHITECT'S RESPONSIBILITIES
- 3 SCOPE OF ARCHITECT'S BASIC SERVICES
- 4 SUPPLEMENTAL AND ADDITIONAL SERVICES
- 5 OWNER'S RESPONSIBILITIES
- 6 COST OF THE WORK
- 7 COPYRIGHTS AND LICENSES
- 8 CLAIMS AND DISPUTES
- 9 TERMINATION OR SUSPENSION
- 10 MISCELLANEOUS PROVISIONS
- 11 COMPENSATION
- 12 SPECIAL TERMS AND CONDITIONS
- 13 SCOPE OF THE AGREEMENT

#### ARTICLE 1 INITIAL INFORMATION

§ 1.1 This Agreement is based on the Initial Information set forth in this Section 1.1.

(For each item in this section, insert the information or a statement such as "not applicable" or "unknown at time of execution.")

§ 1.1.1 The Owner's program for the Project:

(Insert the Owner's program, identify documentation that establishes the Owner's program, or state-the manner in which the program will be developed.)

New City Hall located on new site to include, but not be limited to, customer lobby, offices, restrooms, conference room and stairwell.

§ 1.1.2 The Project's physical characteristics:

(Identify or describe pertinent information about the Project's physical characteristics, such as size; location, dimensions; geotechnical reports; site boundaries; topographic surveys; traffic and utility studies; availability of public and private utilities and services; legal description of the site, etc.)

New Building will be approximately 6,000 SF (+/- ten percent) and will be located 601 E. Broadway.

§ 1.1.3 The Owner's budget for the Cost of the Work, as defined in Section 6.1: (Provide total and, if known, a line item breakdown.)

Preliminary Cost of Work is estimated at \$1,200,000. This figure is subject to change as design progresses and budgets are adjusted.

- § 1.1.4 The Owner's anticipated design and construction milestone dates:
  - .1 Design phase milestone dates, if any:

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User Notes: (3B9ADA35)

#### To be determined.

.2 Construction commencement date:

To be finalized in the Construction Documents.

.3 Substantial Completion date or dates:

To be finalized in the Construction Documents.

.4 Other milestone dates:

§ 1.1.5 The Owner intends the following procurement and delivery method for the Project: (Identify method such as competitive bid or negotiated contract, as well as any requirements for accelerated or fast-track design and construction, multiple bid packages, or phased construction.)

#### Project to be Competitively Bid.

§ 1.1.6 The Owner's anticipated Sustainable Objective for the Project: (Identify and describe the Owner's Sustainable Objective for the Project, if any.)

#### To be determined.

§ 1.1.6.1 If the Owner identifies a Sustainable Objective, the Owner and Architect shall complete and incorporate AIA Document E204<sup>TM</sup>—2017, Sustainable Projects Exhibit, into this Agreement to define the terms, conditions and services related to the Owner's Sustainable Objective. If E204—2017 is incorporated into this agreement, the Owner and Architect shall incorporate the completed E204—2017 into the agreements with the consultants and contractors performing services or Work in any way associated with the Sustainable Objective.

§ 1.1.7 The Owner identifies the following representative in accordance with Section 5.3: (List name, address, and other contact information.)

Lyn Woolford, Police Chief / City Administrator

City of Ashland

Ashland, Missouri

Telephone Number: 573-657-9062

(and other representatives as assigned by the City)

§ 1.1.8 The persons or entities, in addition to the Owner's representative, who are required to review the Architect's submittals to the Owner are as follows:

(List name, address, and other contact information.)

#### Board of Aldermen, City of Ashland, Missouri

§ 1.1.9 The Owner shall retain the following consultants and contractors: (List name, legal status, address, and other contact information.)

.1 Geotechnical Engineer:

Topographic survey and geotechnical engineering by owner. To be determined.

•	a, ,,	~	•
.2	Civil	Eng	ıneer

Engineering Surveys and Services
1113 Fay Street
Columbia, Missouri 65201
Telephone Number: 573-449-2646

.3 Other, if any:

(List any other consultants and contractors retained by the Owner.)

§ 1.1.10 The Architect identifies the following representative in accordance with Section 2.3 (List name, address, and other contact information.)

Jay Berendzen, Architect
Porter, Berendzen & Associates, P.C.
305 E. Broadway, Suite A
Ashland, Missouri 65010
Telephone Number: ,573-657-2022

§ 1.1.11 The Architect shall retain the consultants identified in Sections 1.1.11.1 and 1.1.11.2: (List name, legal status, address, and other contact information.)

#### § 1.1.11.1 Consultants retained under Basic Services:

.1 Structural Engineer:

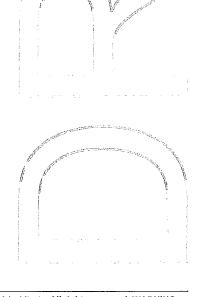
Taylor Structural Engineering, LLC 3100 Brown Station Rd., Suite A Columbia, Missouri 65202 Telephone Number: 573-886-0833

.2 Mechanical Engineer:

Midwest Engineering & Design 3100 Brown Station Rd., Suite C Columbia, Missouri 65202 Telephone Number: 573-875-0045 Fax Number: 573-875-0046

.3 Electrical Engineer:

Midwest Engineering & Design 3100 Brown Station Rd., Suite C Columbia, Missouri 65202 Telephone Number: 573-875-0045 Fax Number: 573-875-0046



#### .4 Civil Engineer:

Engineering Surveys and Services
1113 Fay Street
Columbia, Missouri 65201
Telephone Number: 573-449-2646

§ 1.1.11.2 Consultants retained under Supplemental Services:

To be Determined.

§ 1.1.12 Other Initial Information on which the Agreement is based:

- § 1.2 The Owner and Architect may rely on the Initial Information. Both parties, however, recognize that the Initial Information may materially change and, in that event, the Owner and the Architect shall appropriately adjust the Architect's services, schedule for the Architect's services, and the Architect's compensation. The Owner shall adjust the Owner's budget for the Cost of the Work and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Initial Information.
- § 1.3 The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203<sup>TM</sup>—2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.
- § 1.3.1 Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203<sup>TM</sup>—2013, Building Information Modeling and Digital Data Exhibit; and the requisite AIA Document G202<sup>TM</sup>—2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

#### ARTICLE 2 ARCHITECT'S RESPONSIBILITIES

- § 2.1 The Architect shall provide professional services as set forth in this Agreement. The Architect represents that it is properly licensed in the jurisdiction where the Project is located to provide the services required by this Agreement, or shall cause such services to be performed by appropriately licensed design professionals.
- § 2.2 The Architect shall perform its services consistent with the professional skill and care ordinarily provided by architects practicing in the same or similar locality under the same or similar circumstances. The Architect shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project.
- § 2.3 The Architect shall identify a representative authorized to act on behalf of the Architect with respect to the Project.
- § 2.4 Except with the Owner's knowledge and consent, the Architect shall not engage in any activity, or accept any employment, interest or contribution that would reasonably appear to compromise the Architect's professional judgment with respect to this Project.
- § 2.5 The Architect shall maintain the following insurance until termination of this Agreement. If any of the requirements set forth below are in addition to the types and limits the Architect normally maintains, the Owner shall pay the Architect as set forth in Section 11.9.

- § 2.5.1 Commercial General Liability with policy limits of not less than One Million Dollars and Zero Cents (\$ 1,000,000.00 ) for each occurrence and Two Million Dollars and Zero Cents (\$ 2,000,000.00 ) in the aggregate for bodily injury and property damage.
- § 2.5.2 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Architect with policy limits of not less than One Million Dollars and Zero Cents (\$ 1,000,000.00 ) per accident for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles, along with any other statutorily required automobile coverage.
- § 2.5.3 The Architect may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided such primary and excess or umbrella liability insurance policies result in the same or greater coverage as the coverages required under Sections 2.5.1 and 2.5.2, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.
- § 2.5.4 Workers' Compensation at statutory limits.
- § 2.5.5 Employers' Liability with policy limits not less than One Million Dollars and Zero Cents (\$ 1,000,000.00 ) each accident, One Million Dollars and Zero Cents (\$ 1,000,000.00 ) each employee, and One Million Dollars and Zero Cents (\$ 1,000,000.00 ) policy limit.
- § 2.5.6 Professional Liability covering negligent acts, errors and omissions in the performance of professional services with policy limits of not less than <u>One Million Dollars and Zero Cents</u> (\$ 1,000,000.00 ) per claim and <u>Two Million Dollars and Zero Cents</u> (\$ 2,000,000.00 ) in the aggregate.
- § 2.5.7 Additional Insured Obligations. To the fullest extent permitted by law, the Architect shall cause the primary and excess or umbrella polices for Commercial General Liability and Automobile Liability to include the Owner as an additional insured for claims caused in whole or in part by the Architect's negligent acts or omissions. The additional insured coverage shall be primary and non-contributory to any of the Owner's insurance policies and shall apply to both ongoing and completed operations.
- § 2.5.8 The Architect shall provide certificates of insurance to the Owner that evidence compliance with the requirements in this Section 2.5.

#### ARTICLE 3 SCOPE OF ARCHITECT'S BASIC SERVICES

- § 3.1 The Architect's Basic Services consist of those described in this Article 3 and include usual and customary structural, mechanical, and electrical engineering services. Services not set forth in this Article 3 are Supplemental or Additional Services.
- § 3.1.1 The Architect shall manage the Architect's services, research applicable design criteria, attend Project meetings, communicate with members of the Project team, and report progress to the Owner.
- § 3.1.2 The Architect shall coordinate its services with those services provided by the Owner and the Owner's consultants. The Architect shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of, services and information furnished by the Owner and the Owner's consultants. The Architect shall provide prompt written notice to the Owner if the Architect becomes aware of any error, omission, or inconsistency in such services or information.
- § 3.1.3 As soon as practicable after the date of this Agreement, the Architect shall submit for the Owner's approval a schedule for the performance of the Architect's services. The schedule initially shall include anticipated dates for the commencement of construction and for Substantial Completion of the Work as set forth in the Initial Information. The schedule shall include allowances for periods of time required for the Owner's review, for the performance of the Owner's consultants, and for approval of submissions by authorities having jurisdiction over the Project. Once approved by the Owner, time limits established by the schedule shall not, except for reasonable cause, be exceeded by the Architect or Owner. With the Owner's approval, the Architect shall adjust the schedule, if necessary, as the Project proceeds until the commencement of construction.

- § 3.1.4 The Architect shall not be responsible for an Owner's directive or substitution, or for the Owner's acceptance of non-conforming Work, made or given without the Architect's written approval.
- § 3.1.5 The Architect shall contact governmental authorities required to approve the Construction Documents and entities providing utility services to the Project. The Architect shall respond to applicable design requirements imposed by those authorities and entities.
- § 3.1.6 The Architect shall assist the Owner in connection with the Owner's responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the Project.

#### § 3.2 Schematic Design Phase Services

- § 3.2.1 The Architect shall review the program and other information furnished by the Owner, and shall review laws, codes, and regulations applicable to the Architect's services.
- § 3.2.2 The Architect shall prepare a preliminary evaluation of the Owner's program, schedule, budget for the Cost of the Work, Project site, the proposed procurement and delivery method, and other Initial Information, each in terms of the other, to ascertain the requirements of the Project. The Architect shall notify the Owner of (1) any inconsistencies discovered in the information, and (2) other information or consulting services that may be reasonably needed for the Project.
- § 3.2.3 The Architect shall present its preliminary evaluation to the Owner and shall discuss with the Owner alternative approaches to design and construction of the Project. The Architect shall reach an understanding with the Owner regarding the requirements of the Project.
- § 3.2.4 Based on the Project requirements agreed upon with the Owner, the Architect shall prepare and present, for the Owner's approval, a preliminary design illustrating the scale and relationship of the Project components.
- § 3.2.5 Based on the Owner's approval of the preliminary design, the Architect shall prepare Schematic Design Documents for the Owner's approval. The Schematic Design Documents shall consist of drawings and other documents including a site plan, if appropriate, and preliminary building plans, sections and elevations; and may include some combination of study models, perspective sketches, or digital representations. Preliminary selections of major building systems and construction materials shall be noted on the drawings or described in writing.
- § 3.2.5.1 The Architect shall consider sustainable design alternatives, such as material choices and building orientation, together with other considerations based on program and aesthetics, in developing a design that is consistent with the Owner's program, schedule and budget for the Cost of the Work. The Owner may obtain more advanced sustainable design services as a Supplemental Service under Section 4.1.1.
- § 3.2.5.2 The Architect shall consider the value of alternative materials, building systems and equipment, together with other considerations based on program and aesthetics, in developing a design for the Project that is consistent with the Owner's program, schedule, and budget for the Cost of the Work.
- § 3.2.6 The Architect shall submit to the Owner an estimate of the Cost of the Work prepared in accordance with Section 6.3.
- § 3.2.7 The Architect shall submit the Schematic Design Documents to the Owner, and request the Owner's approval.

#### § 3.3 Design Development Phase Services

§ 3.3.1 Based on the Owner's approval of the Schematic Design Documents, and on the Owner's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the Architect shall prepare Design Development Documents for the Owner's approval. The Design Development Documents shall illustrate and describe the development of the approved Schematic Design Documents and shall consist of drawings and other documents including plans, sections, elevations, typical construction details, and diagrammatic layouts of building systems to fix and describe the size and character of the Project as to architectural, structural, mechanical and

electrical systems, and other appropriate elements. The Design Development Documents shall also include outline specifications that identify major materials and systems and establish, in general, their quality levels.

- § 3.3.2 The Architect shall update the estimate of the Cost of the Work prepared in accordance with Section 6.3.
- § 3.3.3 The Architect shall submit the Design Development Documents to the Owner, advise the Owner of any adjustments to the estimate of the Cost of the Work, and request the Owner's approval.

#### § 3.4 Construction Documents Phase Services

- § 3.4.1 Based on the Owner's approval of the Design Development Documents, and on the Owner's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the Architect shall-prepare Construction Documents for the Owner's approval. The Construction Documents shall illustrate and describe the further development of the approved Design Development Documents and shall consist of Drawings and Specifications setting forth in detail the quality levels and performance criteria of materials and systems and other requirements for the construction of the Work. The Owner and Architect acknowledge that, in order to perform the Work, the Contractor will provide additional information, including Shop Drawings, Product Data, Samples and other similar submittals, which the Architect shall review in accordance with Section 3.6.4.
- § 3.4.2 The Architect shall incorporate the design requirements of governmental authorities having jurisdiction over the Project into the Construction Documents.
- § 3.4.3 During the development of the Construction Documents, the Architect shall assist the Owner in the development and preparation of (1) procurement information that describes the time, place, and conditions of bidding, including bidding or proposal forms; (2) the form of agreement between the Owner and Contractor; and (3) the Conditions of the Contract for Construction (General, Supplementary and other Conditions). The Architect shall also compile a project manual that includes the Conditions of the Contract for Construction and Specifications, and may include bidding requirements and sample forms.
- § 3.4.4 The Architect shall update the estimate for the Cost of the Work prepared in accordance with Section 6.3.
- § 3.4.5 The Architect shall submit the Construction Documents to the Owner, advise the Owner of any adjustments to the estimate of the Cost of the Work, take any action required under Section 6.5, and request the Owner's approval.

#### § 3.5 Procurement Phase Services

#### § 3.5.1 General

The Architect shall assist the Owner in establishing a list of prospective contractors. Following the Owner's approval of the Construction Documents, the Architect shall assist the Owner in (1) obtaining either competitive bids or negotiated proposals; (2) confirming responsiveness of bids or proposals; (3) determining the successful bid or proposal, if any; and, (4) awarding and preparing contracts for construction.

#### § 3.5.2 Competitive Bidding

§ 3.5.2.1 Bidding Documents shall consist of bidding requirements and proposed Contract Documents.

- § 3.5.2.2 The Architect shall assist the Owner in bidding the Project by:
  - .1 facilitating the distribution of Bidding Documents to prospective bidders;
  - .2 organizing and conducting a pre-bid conference for prospective bidders;
  - .3 preparing responses to questions from prospective bidders and providing clarifications and interpretations of the Bidding Documents to the prospective bidders in the form of addenda; and,
  - .4 organizing and conducting the opening of the bids, and subsequently documenting and distributing the bidding results, as directed by the Owner.

§ 3.5.2.3 If the Bidding Documents permit substitutions, upon the Owner's written authorization, the Architect shall, as an Additional Service, consider requests for substitutions and prepare and distribute addenda identifying approved substitutions to all prospective bidders.

#### § 3.5.3 Negotiated Proposals

§ 3.5.3.1 Proposal Documents shall consist of proposal requirements and proposed Contract Documents.

§ 3.5.3.2 The Architect shall assist the Owner in obtaining proposals by:

- .1 facilitating the distribution of Proposal Documents for distribution to prospective contractors and requesting their return upon completion of the negotiation process;
- .2 organizing and participating in selection interviews with prospective contractors;
- .3 preparing responses to questions from prospective contractors and providing clarifications and interpretations of the Proposal Documents to the prospective contractors in the form of addenda; and,
- .4 participating in negotiations with prospective contractors, and subsequently preparing a summary report of the negotiation results, as directed by the Owner.

§ 3.5.3.3 If the Proposal Documents permit substitutions, upon the Owner's written authorization, the Architect shall, as an Additional Service, consider requests for substitutions and prepare and distribute addenda identifying approved substitutions to all prospective contractors.

#### § 3.6 Construction Phase Services

#### § 3.6.1 General

§ 3.6.1.1 The Architect shall provide administration of the Contract between the Owner and the Contractor as set forth below and in AIA Document A201<sup>TM</sup>—2017, General Conditions of the Contract for Construction. If the Owner and Contractor modify AIA Document A201—2017, those modifications shall not affect the Architect's services under this Agreement unless the Owner and the Architect amend this Agreement.

§ 3.6.1.2 The Architect shall advise and consult with the Owner during the Construction Phase Services. The Architect shall have authority to act on behalf of the Owner only to the extent provided in this Agreement. The Architect shall not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, nor shall the Architect be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect shall be responsible for the Architect's negligent acts or omissions, but shall not have control over or charge of, and shall not be responsible for, acts or omissions of the Contractor or of any other persons or entities performing portions of the Work.

§ 3.6.1.3 Subject to Section 4.2 and except as provided in Section 3.6.6.5, the Architect's responsibility to provide Construction Phase Services commences with the award of the Contract for Construction and terminates on the date the Architect issues the final Certificate for Payment.

#### § 3.6.2 Evaluations of the Work

§ 3.6.2.1 The Architect shall visit the site at intervals appropriate to the stage of construction, or as otherwise required in Section 4.2.3, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine, in general, if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work On the basis of the site visits, the Architect shall keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work.

§ 3.6.2.2 The Architect has the authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect shall have the authority to require inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

- § 3.6.2.3 The Architect shall interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests shall be made in writing within any time limits agreed upon or otherwise with reasonable promptness.
- § 3.6.2.4 Interpretations and decisions of the Architect shall be consistent with the intent of, and reasonably inferable from, the Contract Documents and shall be in writing or in the form of drawings. When making such interpretations and decisions, the Architect shall endeavor to secure faithful performance by both Owner and Contractor, shall not show partiality to either, and shall not be liable for results of interpretations or decisions rendered in good faith. The Architect's decisions on matters relating to aesthetic effect shall be final if consistent with the intent expressed in the Contract Documents.
- § 3.6.2.5 Unless the Owner and Contractor designate another person to serve as an Initial Decision Maker, as that term is defined in AIA Document A201–2017, the Architect shall render initial decisions on Claims between the Owner and Contractor as provided in the Contract Documents.

#### § 3.6.3 Certificates for Payment to Contractor

- § 3.6.3.1 The Architect shall review and certify the amounts due the Contractor and shall issue certificates in such amounts. The Architect's certification for payment shall constitute a representation to the Owner, based on the Architect's evaluation of the Work as provided in Section 3.6.2 and on the data comprising the Contractor's Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to (1) an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, (2) results of subsequent tests and inspections, (3) correction of minor deviations from the Contract Documents prior to completion, and (4) specific qualifications expressed by the Architect.
- § 3.6.3.2 The issuance of a Certificate for Payment shall not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment, or (4) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.
- § 3.6.3.3 The Architect shall maintain a record of the Applications and Certificates for Payment.

#### § 3.6.4 Submittals

- § 3.6.4.1 The Architect shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval of the schedule. The Architect's action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time, in the Architect's professional judgment, to permit adequate review.
- § 3.6.4.2 The Architect shall review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions; quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- § 3.6.4.3 If the Contract Documents specifically require the Contractor to provide professional design services or certifications by a design professional related to systems, materials, or equipment, the Architect shall specify the appropriate performance and design criteria that such services must satisfy. The Architect shall review and take appropriate action on Shop Drawings and other submittals related to the Work designed or certified by the Contractor's design professional, provided the submittals bear such professional's seal and signature when submitted to the Architect. The Architect's review shall be for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect shall be entitled to

rely upon, and shall not be responsible for, the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals.

§ 3.6.4.4 Subject to Section 4.2, the Architect shall review and respond to requests for information about the Contract Documents. The Architect shall set forth, in the Contract Documents, the requirements for requests for information. Requests for information shall include, at a minimum, a detailed written statement that indicates the specific Drawings or Specifications in need of clarification and the nature of the clarification requested. The Architect's response to such requests shall be made in writing within any time limits agreed upon, or otherwise with reasonable promptness. If appropriate, the Architect shall prepare and issue supplemental Drawings and Specifications in response to the requests for information.

§ 3.6.4.5 The Architect shall maintain a record of submittals and copies of submittals supplied by the Contractor in accordance with the requirements of the Contract Documents.

#### § 3.6.5 Changes in the Work

§ 3.6.5.1 The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. Subject to Section 4.2, the Architect shall prepare Change Orders and Construction Change Directives for the Owner's approval and execution in accordance with the Contract Documents.

§ 3.6.5.2 The Architect shall maintain records relative to changes in the Work.

#### § 3.6.6 Project Completion

#### § 3.6.6.1 The Architect shall:

- .1 conduct inspections to determine the date or dates of Substantial Completion and the date of final completion;
- .2 issue Certificates of Substantial Completion;
- .3 forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract Documents and received from the Contractor; and,
- .4 issue a final Certificate for Payment based upon a final inspection indicating that, to the best of the Architect's knowledge, information, and belief, the Work complies with the requirements of the Contract Documents.
- § 3.6.6.2 The Architect's inspections shall be conducted with the Owner to check conformance of the Work with the requirements of the Contract Documents and to verify the accuracy and completeness of the list submitted by the Contractor of Work to be completed or corrected.
- § 3.6.6.3 When Substantial Completion has been achieved, the Architect shall inform the Owner about the balance of the Contract Sum remaining to be paid the Contractor, including the amount to be retained from the Contract Sum, if any, for final completion or correction of the Work.
- § 3.6.6.4 The Architect shall forward to the Owner the following information received from the Contractor: (1) consent of surety or sureties, if any, to reduction in or partial release of retainage or the making of final payment; (2) affidavits, receipts, releases and waivers of liens, or bonds indemnifying the Owner against liens; and (3) any other documentation required of the Contractor under the Contract Documents.
- § 3.6.6.5 Upon request of the Owner, and prior to the expiration of one year from the date of Substantial Completion, the Architect shall, without additional compensation, conduct a meeting with the Owner to review the facility operations and performance.

#### ARTICLE 4 SUPPLEMENTAL AND ADDITIONAL SERVICES

#### § 4.1 Supplemental Services

§ 4.1.1 The services listed below are not included in Basic Services but may be required for the Project. The Architect shall provide the listed Supplemental Services only if specifically designated in the table below as the Architect's responsibility, and the Owner shall compensate the Architect as provided in Section 11.2. Unless otherwise specifically addressed in this Agreement, if neither the Owner nor the Architect is designated, the parties agree that the listed Supplemental Service is not being provided for the Project.

(Designate the Architect's Supplemental Services and the Owner's Supplemental Services required for the Project by indicating whether the Architect or Owner shall be responsible for providing the identified Supplemental Service. Insert a description of the Supplemental Services in Section 4.1.2 below or attach the description of services as an exhibit to this Agreement.)

Supplemental Services	Responsibility (Architect, Owner, or not provided)
§ 4.1.1.1 Programming	NP
§ 4.1.1.2 Multiple preliminary designs	NP
§ 4.1.1.3 Measured drawings	NP
§ 4.1.1.4 Existing facilities surveys	NP
§ 4.1.1.5 Site evaluation and planning	NP.
§ 4.1.1.6 Building Information Model management responsibilities	<u>NP</u>
§ 4.1.1.7 Development of Building Information Models for post construction use	NP
§ 4.1.1.8 Civil engineering	Architect
§ 4.1.1.9 Landscape design	<u>NP</u>
§ 4.1.1.10 Architectural interior design	<u>NP</u>
§ 4.1.1.11 Value analysis	<u>NP</u>
§ 4.1.1.12 Detailed cost estimating beyond that required in Section 6.3	NP - contains the
§ 4.1.1.13 On-site project representation	<u>NP</u>
§ 4.1.1.14 Conformed documents for construction	<u>NP</u>
§ 4.1.1.15 As-designed record drawings	Architect
§ 4.1.1.16 As-constructed record drawings	Architect
§ 4.1.1.17 Post-occupancy evaluation	NP
§ 4.1.1.18 Facility support services	<u>NP</u>
§ 4.1.1.19 Tenant-related services	NP
§ 4.1.1.20 Architect's coordination of the Owner's consultants	<u>NP</u> .
§ 4.1.1.21 Telecommunications/data design	<u>NP</u>
§ 4.1.1.22 Security evaluation and planning	NP (
§ 4.1.1.23 Commissioning	NP /
§ 4.1.1.24 Sustainable Project Services pursuant to Section 4.1.3	<u>NP</u>
§ 4.1.1.25 Fast-track design services	NP
§ 4.1.1.26 Multiple bid packages	<u>NP</u>
§ 4.1.1.27 Historic preservation	<u>NP</u>
§ 4.1.1.28 Furniture, furnishings, and equipment design	<u>NP</u>
§ 4.1.1.29 Other services provided by specialty Consultants	NP
§ 4.1.1.30 Other Supplemental Services	NP

§ 4.1.2 Description of Supplemental Services

§ 4.1.2.1 A description of each Supplemental Service identified in Section 4.1.1 as the Architect's responsibility is provided below.

(Describe in detail the Architect's Supplemental Services identified in Section 4.1.1 or, if set forth in an exhibit, identify the exhibit. The AIA publishes a number of Standard Form of Architect's Services documents-that-can-be included as an exhibit to describe the Architect's Supplemental Services.)

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Additional Services shall be negotiated and agreed upon between Owner and Architect. Any Agreement shall be made in writing.

§ 4.1.2.2 A description of each Supplemental Service identified in Section 4.1.1 as the Owner's responsibility is provided below.

(Describe in detail the Owner's Supplemental Services identified in Section 4.1.1 or, if set forth in an exhibit, identify the exhibit.)

Additional Services shall be negotiated and agreed upon between Owner and Architect. Any Agreement shall be make in writing.

§ 4.1.3 If the Owner identified a Sustainable Objective in Article 1, the Architect shall provide, as a Supplemental Service, the Sustainability Services required in AIA Document E204<sup>TM</sup>—2017, Sustainable Projects Exhibit, attached to this Agreement. The Owner shall compensate the Architect as provided in Section 11.2.

#### § 4.2 Architect's Additional Services

The Architect may provide Additional Services after execution of this Agreement without invalidating the Agreement. Except for services required due to the fault of the Architect, any Additional Services provided in accordance with this Section 4.2 shall entitle the Architect to compensation pursuant to Section 11.3 and an appropriate adjustment in the Architect's schedule.

§ 4.2.1 Upon recognizing the need to perform the following Additional Services, the Architect shall notify the Owner with reasonable promptness and explain the facts and circumstances giving rise to the need. The Architect shall not proceed to provide the following Additional Services until the Architect receives the Owner's written authorization:

Services necessitated by a change in the Initial Information, previous instructions or approvals given by the Owner, or a material change in the Project including size, quality, complexity, the Owner's schedule or budget for Cost of the Work, or procurement or delivery method;

.2 Services necessitated by the enactment or revision of codes, laws, or regulations, including changing or editing previously prepared Instruments of Service;

.3 Changing or editing previously prepared Instruments of Service necessitated by official interpretations of applicable codes, laws or regulations that are either (a) contrary to specific interpretations by the applicable authorities having jurisdiction made prior to the issuance of the building permit, or (b) contrary to requirements of the Instruments of Service when those Instruments of Service were prepared in accordance with the applicable standard of care;

.4 Services necessitated by decisions of the Owner not rendered in a timely manner or any other failure of performance on the part of the Owner or the Owner's consultants or contractors;

.5 Preparing digital models or other design documentation for transmission to the Owner's consultants and contractors, or to other Owner-authorized recipients;

.6 Preparation of design and documentation for alternate bid or proposal requests proposed by the Owner;

.7 Preparation for, and attendance at, a public presentation, meeting or hearing;

.8 Preparation for, and attendance at, a dispute resolution proceeding or legal proceeding, except where the Architect is party thereto;

.9 Evaluation of the qualifications of entities providing bids or proposals;

.10 Consultation concerning replacement of Work resulting from fire or other cause during construction; or,

.11 Assistance to the Initial Decision Maker, if other than the Architect.

§ 4.2.2 To avoid delay in the Construction Phase, the Architect shall provide the following Additional Services, notify the Owner with reasonable promptness, and explain the facts and circumstances giving rise to the need. If, upon receipt of the Architect's notice, the Owner determines that all or parts of the services are not required, the Owner shall give prompt written notice to the Architect of the Owner's determination. The Owner shall compensate the Architect for the services provided prior to the Architect's receipt of the Owner's notice.

.1 Reviewing a Contractor's submittal out of sequence from the submittal schedule approved by the Architect;

.2 Responding to the Contractor's requests for information that are not prepared in accordance with the Contract Documents or where such information is available to the Contractor from a careful study

- and comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation;
- .3 Preparing Change Orders and Construction Change Directives that require evaluation of Contractor's proposals and supporting data, or the preparation or revision of Instruments of Service;
- .4 Evaluating an extensive number of Claims as the Initial Decision Maker; or,
- .5 Evaluating substitutions proposed by the Owner or Contractor and making subsequent revisions to Instruments of Service resulting therefrom.

§ 4.2.3 The Architect shall provide Construction Phase Services exceeding the limits set forth below as Additional Services. When the limits below are reached, the Architect shall notify the Owner:

- .1 Two (2) reviews of each Shop Drawing, Product Data item, sample and similar submittals of the Contractor
- .2 Every two weeks on average for (||) visits to the site by the Architect during construction
- .3 <u>Two (2)</u> inspections for any portion of the Work to determine whether such portion of the Work is substantially complete in accordance with the requirements of the Contract Documents
- 4 Two (2) inspections for any portion of the Work to determine final completion
- § 4.2.4 Except for services required under Section 3.6.6.5 and those services that do not exceed the limits set forth in Section 4.2.3, Construction Phase Services provided more than 60 days after (1) the date of Substantial Completion of the Work or (2) the initial date of Substantial Completion identified in the agreement between the Owner and Contractor, whichever is earlier, shall be compensated as Additional Services to the extent the Architect incurs additional cost in providing those Construction Phase Services.
- § 4.2.5 If the services covered by this Agreement have not been completed within twenty four (24) months of the date of this Agreement, through no fault of the Architect, extension of the Architect's services beyond that time shall be compensated as Additional Services.

#### ARTICLE 5 OWNER'S RESPONSIBILITIES

- § 5.1 Unless otherwise provided for under this Agreement, the Owner shall provide information in a timely manner regarding requirements for and limitations on the Project, including a written program, which shall set forth the Owner's objectives; schedule; constraints and criteria, including space requirements and relationships; flexibility; expandability; special equipment; systems; and site requirements.
- § 5.2 The Owner shall establish the Owner's budget for the Project, including (1) the budget for the Cost of the Work as defined in Section 6.1; (2) the Owner's other costs; and, (3) reasonable contingencies related to all of these costs. The Owner shall update the Owner's budget for the Project as necessary throughout the duration of the Project until final completion. If the Owner significantly increases or decreases the Owner's budget for the Cost of the Work, the Owner shall notify the Architect. The Owner and the Architect shall thereafter agree to a corresponding change in the Project's scope and quality.
- § 5.3 The Owner shall identify a representative authorized to act on the Owner's behalf with respect to the Project. The Owner shall render decisions and approve the Architect's submittals in a timely manner in order to avoid unreasonable delay in the orderly and sequential progress of the Architect's services.
- § 5.4 The Owner shall furnish surveys to describe physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements and adjoining property and structures; designated wetlands; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions, and other necessary data with respect to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths. All the information on the survey shall be referenced to a Project benchmark.
- § 5.5 The Owner shall furnish services of geotechnical engineers, which may include test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations.

- § 5.6 The Owner shall provide the Supplemental Services designated as the Owner's responsibility in Section 4.1.1.
- § 5.7 If the Owner identified a Sustainable Objective in Article 1, the Owner shall fulfill its responsibilities as required in AIA Document E204<sup>TM</sup>—2017, Sustainable Projects Exhibit, attached to this Agreement.
- § 5.8 The Owner shall coordinate the services of its own consultants with those services provided by the Architect. Upon the Architect's request, the Owner shall furnish copies of the scope of services in the contracts between the Owner and the Owner's consultants. The Owner shall furnish the services of consultants other than those designated as the responsibility of the Architect in this Agreement, or authorize the Architect to furnish them as an Additional Service, when the Architect requests such services and demonstrates that they are reasonably required by the scope of the Project. The Owner shall require that its consultants and contractors maintain insurance, including professional liability insurance, as appropriate to the services or work provided.
- § 5.9 The Owner shall furnish tests, inspections and reports required by law or the Contract Documents, such as structural, mechanical, and chemical tests, tests for air and water pollution, and tests for hazardous materials.
- § 5.10 The Owner shall furnish all legal, insurance and accounting services, including auditing services, that may be reasonably necessary at any time for the Project to meet the Owner's needs and interests.
- § 5.11 The Owner shall provide prompt written notice to the Architect if the Owner becomes aware of any fault or defect in the Project, including errors, omissions or inconsistencies in the Architect's Instruments of Service.
- § 5.12 The Owner shall include the Architect in all communications with the Contractor that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect.
- § 5.13 Before executing the Contract for Construction, the Owner shall coordinate the Architect's duties and responsibilities set forth in the Contract for Construction with the Architect's services set forth in this Agreement. The Owner shall provide the Architect a copy of the executed agreement between the Owner and Contractor, including the General Conditions of the Contract for Construction.
- § 5.14 The Owner shall provide the Architect access to the Project site prior to commencement of the Work and shall obligate the Contractor to provide the Architect access to the Work wherever it is in preparation or progress.
- § 5.15 Within 15 days after receipt of a written request from the Architect, the Owner shall furnish the requested information as necessary and relevant for the Architect to evaluate, give notice of, or enforce lien rights.

#### ARTICLE 6 COST OF THE WORK

- § 6.1 For purposes of this Agreement, the Cost of the Work shall be the total cost to the Owner to construct all elements of the Project designed or specified by the Architect and shall include contractors general conditions costs, overhead and profit. The Cost of the Work also includes the reasonable value of labor, materials, and equipment, donated to, or otherwise furnished by, the Owner. The Cost of the Work does not include the compensation of the Architect; the costs of the land, rights-of-way, financing, or contingencies for changes in the Work; or other costs that are the responsibility of the Owner.
- § 6.2 The Owner's budget for the Cost of the Work is provided in Initial Information, and shall be adjusted throughout the Project as required under Sections 5.2, 6.4 and 6.5. Evaluations of the Owner's budget for the Cost of the Work, and the preliminary estimate of the Cost of the Work and updated estimates of the Cost of the Work, prepared by the Architect, represent the Architect's judgment as a design professional. It is recognized, however, that neither the Architect nor the Owner has control over the cost of labor, materials, or equipment; the Contractor's methods of determining bid prices; or competitive bidding, market, or negotiating conditions. Accordingly, the Architect cannot and does not warrant or represent that bids or negotiated prices will not vary from the Owner's budget for the Cost of the Work, or from any estimate of the Cost of the Work, or evaluation, prepared or agreed to by the Architect.

- § 6.3 In preparing estimates of the Cost of Work, the Architect shall be permitted to include contingencies for design, bidding, and price escalation; to determine what materials, equipment, component systems, and types of construction are to be included in the Contract Documents; to recommend reasonable adjustments in the program and scope of the Project; and to include design alternates as may be necessary to adjust the estimated Cost of the Work to meet the Owner's budget. The Architect's estimate of the Cost of the Work shall be based on current area, volume or similar conceptual estimating techniques. If the Owner requires a detailed estimate of the Cost of the Work, the Architect shall provide such an estimate, if identified as the Architect's responsibility in Section 4.1.1, as a Supplemental Service.
- § 6.4 If, through no fault of the Architect, the Procurement Phase has not commenced within 90 days after the Architect submits the Construction Documents to the Owner, the Owner's budget for the Cost of the Work shall be adjusted to reflect changes in the general level of prices in the applicable construction market.
- § 6.5 If at any time the Architect's estimate of the Cost of the Work exceeds the Owner's budget for the Cost of the Work, the Architect shall make appropriate recommendations to the Owner to adjust the Project's size, quality, or budget for the Cost of the Work, and the Owner shall cooperate with the Architect in making such adjustments.
- § 6.6 If the Owner's budget for the Cost of the Work at the conclusion of the Construction Documents Phase Services is exceeded by the lowest bona fide bid or negotiated proposal, the Owner shall
  - .1 give written approval of an increase in the budget for the Cost of the Work;
  - .2 authorize rebidding or renegotiating of the Project within a reasonable time;
  - .3 terminate in accordance with Section 9.5;
  - .4 in consultation with the Architect, revise the Project program, scope, or quality as required to reduce the Cost of the Work; or,
  - .5 implement any other mutually acceptable alternative.
- § 6.7 If the Owner chooses to proceed under Section 6.6.4, the Architect shall modify the Construction Documents as necessary to comply with the Owner's budget for the Cost of the Work at the conclusion of the Construction Documents Phase Services, or the budget as adjusted under Section 6.6.1. If the Owner requires the Architect to modify the Construction Documents because the lowest bona fide bid or negotiated proposal exceeds the Owner's budget for the Cost of the Work due to market conditions the Architect could not reasonably anticipate, the Owner shall compensate the Architect for the modifications as an Additional Service pursuant to Section 11.3; otherwise the Architect's services for modifying the Construction Documents shall be without additional compensation. In any event, the Architect's modification of the Construction Documents shall be the limit of the Architect's responsibility under this Article 6.

#### ARTICLE 7 COPYRIGHTS AND LICENSES

- § 7.1 The Architect and the Owner warrant that in transmitting Instruments of Service, or any other information, the transmitting party is the copyright owner of such information or has permission from the copyright owner to transmit such information for its use on the Project.
- § 7.2 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and shall retain all common law, statutory and other reserved rights, including copyrights. Submission or distribution of Instruments of Service to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the reserved rights of the Architect and the Architect's consultants.
- § 7.3 The Architect grants to the Owner a nonexclusive license to use the Architect's Instruments of Service solely and exclusively for purposes of constructing, using, maintaining, altering and adding to the Project, provided that the Owner substantially performs its obligations under this Agreement, including prompt payment of all sums due pursuant to Article 9 and Article 11. The Architect shall obtain similar nonexclusive licenses from the Architect's consultants consistent with this Agreement. The license granted under this section permits the Owner to authorize the Contractor, Subcontractors, Sub-subcontractors, and suppliers, as well as the Owner's consultants and separate contractors, to reproduce applicable portions of the Instruments of Service, subject to any protocols established pursuant to Section 1.3, solely and exclusively for use in performing services or construction for the Project. If the

Architect rightfully terminates this Agreement for cause as provided in Section 9.4, the license granted in this Section 7.3 shall terminate.

- § 7.3.1 In the event the Owner uses the Instruments of Service without retaining the authors of the Instruments of Service, the Owner releases the Architect and Architect's consultant(s) from all claims and causes of action arising from such uses. The Owner, to the extent permitted by law, further agrees to indemnify and hold harmless the Architect and its consultants from all costs and expenses, including the cost of defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from the Owner's use of the Instruments of Service under this Section 7.3.1. The terms of this Section 7.3.1 shall not apply if the Owner rightfully terminates this Agreement for cause under Section 9.4.
- § 7.4 Except for the licenses granted in this Article 7, no other license or right shall be deemed granted or implied under this Agreement. The Owner shall not assign, delegate, sublicense, pledge or otherwise transfer any license granted herein to another party without the prior written agreement of the Architect. Any unauthorized use of the Instruments of Service shall be at the Owner's sole risk and without liability to the Architect and the Architect's consultants.
- § 7.5 Except as otherwise stated in Section 7.3, the provisions of this Article 7 shall survive the termination of this Agreement.

#### ARTICLE 8 CLAIMS AND DISPUTES

#### § 8.1 General

- § 8.1.1 The Owner and Architect shall commence all claims and causes of action against the other and arising out of or related to this Agreement, whether in contract, tort, or otherwise, in accordance with the requirements of the binding dispute resolution method selected in this Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Architect waive all claims and causes of action not commenced in accordance with this Section 8.1.1.
- § 8.1.2 To the extent damages are covered by property insurance, the Owner and Architect waive all rights against each other and against the contractors, consultants, agents, and employees of the other for damages, except such rights as they may have to the proceeds of such insurance as set forth in AIA Document A201–2017, General Conditions of the Contract for Construction. The Owner or the Architect, as appropriate, shall require of the contractors, consultants, agents, and employees of any of them, similar waivers in favor of the other parties enumerated herein.
- § 8.1.3 The Architect and Owner waive consequential damages for claims, disputes, or other matters in question, arising out of or relating to this Agreement. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement, except as specifically provided in Section 9.7.

#### § 8.2 Mediation

- § 8.2.1 Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to mediation as a condition precedent to binding dispute resolution. If such matter relates to or is the subject of a lien arising out of the Architect's services, the Architect may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the matter by mediation or by binding dispute resolution.
- § 8.2.2 The Owner and Architect shall endeavor to resolve claims, disputes and other matters in question between them by mediation, which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of this Agreement. A request for mediation shall be made in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of a complaint or other appropriate demand for binding dispute resolution but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration proceeding is stayed pursuant to this section, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 8.2.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 8.2.4 If the parties do not resolve a dispute through mediation pursuant to this Section 8.2, the method of binding dispute resolution shall be the following:

(Check the appropriate box.)	
-X Arbitration pursuant to Section 8.3 of this Agreement	
[ ] Litigation in a court of competent jurisdiction	
Other: (Specify)	SAL PARTIES AND

If the Owner and Architect do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, the dispute will be resolved in a court of competent jurisdiction.

#### § 8.3 Arbitration

- § 8.3.1 If the parties have selected arbitration as the method for binding dispute resolution in this Agreement, any claim, dispute or other matter in question arising out of or related to this Agreement subject to, but not resolved by, mediation shall be subject to arbitration, which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of this Agreement. A demand for arbitration shall be made in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the arbitration.
- § 8.3.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the claim, dispute or other matter in question would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the claim, dispute or other matter in question.
- § 8.3.2 The foregoing agreement to arbitrate, and other agreements to arbitrate with an additional person or entity duly consented to by parties to this Agreement, shall be specifically enforceable in accordance with applicable law in any court having jurisdiction thereof.
- § 8.3.3 The award rendered by the arbitrator(s) shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

#### § 8.3.4 Consolidation or Joinder

- § 8.3.4.1 Either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation; (2) the arbitrations to be consolidated substantially involve common questions of law or fact; and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).
- § 8.3.4.2 Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.
- § 8.3.4.3 The Owner and Architect grant to any person or entity made a party to an arbitration conducted under this Section 8.3, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Architect under this Agreement.

§ 8.4 The provisions of this Article 8 shall survive the termination of this Agreement.

#### ARTICLE 9 TERMINATION OR SUSPENSION

- § 9.1 If the Owner fails to make payments to the Architect in accordance with this Agreement, such failure shall be considered substantial nonperformance and cause for termination or, at the Architect's option, cause for suspension of performance of services under this Agreement. If the Architect elects to suspend services, the Architect shall give seven days' written notice to the Owner before suspending services. In the event of a suspension of services, the Architect shall have no liability to the Owner for delay or damage caused the Owner because of such suspension of services. Before resuming services, the Owner shall pay the Architect all sums due prior to suspension and any expenses incurred in the interruption and resumption of the Architect's services. The Architect's fees for the remaining services and the time schedules shall be equitably adjusted.
- § 9.2 If the Owner suspends the Project, the Architect shall be compensated for services performed prior to notice of such suspension. When the Project is resumed, the Architect shall be compensated for expenses incurred in the interruption and resumption of the Architect's services. The Architect's fees for the remaining services and the time schedules shall be equitably adjusted.
- § 9.3 If the Owner suspends the Project for more than 90 cumulative days for reasons other than the fault of the Architect, the Architect may terminate this Agreement by giving not less than seven days' written notice.
- § 9.4 Either party may terminate this Agreement upon not less than seven days' written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.
- § 9.5 The Owner may terminate this Agreement upon not less than seven days' written notice to the Architect for the Owner's convenience and without cause.
- § 9.6 If the Owner terminates this Agreement for its convenience pursuant to Section 9.5, or the Architect terminates this Agreement pursuant to Section 9.3, the Owner shall compensate the Architect for services performed prior to termination, Reimbursable Expenses incurred, and costs attributable to the Architect's termination of consultant agreements.
- § 9.7 In addition to any amounts paid under Section 9.6, if the Owner terminates this Agreement for its convenience pursuant to Section 9.5, or the Architect terminates this Agreement pursuant to Section 9.3, the Owner shall pay to the Architect the following fees:

(Set forth below the amount of any termination or licensing fee, or the method for determining any termination or licensing fee.)

- .1 Termination Fee:
- .2 Licensing Fee if the Owner intends to continue using the Architect's Instruments of Service:
- § 9.8 Except as otherwise expressly provided herein, this Agreement shall terminate one year from the date of Substantial Completion.
- § 9.9 The Owner's rights to use the Architect's Instruments of Service in the event of a termination of this Agreement are set forth in Article 7 and Section 9.7.

#### ARTICLE 10 MISCELLANEOUS PROVISIONS

§ 10.1 This Agreement shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 8.3.

§ 10.2 Terms in this Agreement shall have the same meaning as those in AIA Document A201–2017, General Conditions of the Contract for Construction.

§ 10.3 The Owner and Architect, respectively, bind themselves, their agents, successors, assigns, and legal representatives to this Agreement. Neither the Owner nor the Architect shall assign this Agreement without the written consent of the other, except that the Owner may assign this Agreement to a lender providing financing for the Project if the lender agrees to assume the Owner's rights and obligations under this Agreement, including any payments due to the Architect by the Owner prior to the assignment.

§ 10.4 If the Owner requests the Architect to execute certificates, the proposed language of such certificates shall be submitted to the Architect for review at least 14 days prior to the requested dates of execution. If the Owner requests the Architect to execute consents reasonably required to facilitate assignment to a lender, the Architect shall execute all such consents that are consistent with this Agreement, provided the proposed consent is submitted to the Architect for review at least 14 days prior to execution. The Architect shall not be required to execute certificates or consents that would require knowledge, services, or responsibilities beyond the scope of this Agreement.

§ 10.5 Nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Owner or Architect.

§ 10.6 Unless otherwise required in this Agreement, the Architect shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to, hazardous materials or toxic substances in any form at the Project site.

§ 10.7 The Architect shall have the right to include photographic or artistic representations of the design of the Project among the Architect's promotional and professional materials. The Architect shall be given reasonable access to the completed Project to make such representations. However, the Architect's materials shall not include the Owner's confidential or proprietary information if the Owner has previously advised the Architect in writing of the specific information considered by the Owner to be confidential or proprietary. The Owner shall provide professional credit for the Architect in the Owner's promotional materials for the Project. This Section 10.7 shall survive the termination of this Agreement unless the Owner terminates this Agreement for cause pursuant to Section 9.4.

§ 10.8 If the Architect or Owner receives information specifically designated as "confidential" or "business proprietary," the receiving party shall keep such information strictly confidential and shall not disclose it to any other person except as set forth in Section 10.8.1. This Section 10.8 shall survive the termination of this Agreement.

§ 10.8.1 The receiving party may disclose "confidential" or "business proprietary" information after 7 days' notice to the other party, when required by law, arbitrator's order, or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or to the extent such information is reasonably necessary for the receiving party to defend itself in any dispute. The receiving party may also disclose such information to its employees, consultants, or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of such information as set forth in this Section 10.8.

§ 10.9 The invalidity of any provision of the Agreement shall not invalidate the Agreement or its remaining provisions. If it is determined that any provision of the Agreement violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Agreement shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Agreement.

#### ARTICLE 11 COMPENSATION

§ 11.1 For the Architect's Basic Services described under Article 3, the Owner shall compensate the Architect as follows:

.1 Stipulated Sum (Insert amount)

- .2 Percentage Basis (Insert percentage value)
  - (1) % of the Owner's budget for the Cost of the Work, as calculated in accordance with Section 11.6.
- .3 Other (Describe the method of compensation)

Compensation for Basic Services shall be Calculated based on the Cost of Work and shall be as follows:

- For small projects of Five Hundred Thousand Dollars (\$500,000.00) or less, the Architect's fee shall be Nine Percent (9%) of the Cost of Work or as negotiated with the Owner at an hourly rate.
- For Projects greater than Five Hundred Thousand Dollars (\$500,000.00) but less than One Million Dollars (\$1,000,000.00), the Architect's fee shall be Eight Percent (8%) of the Cost of Work.
- For large projects the Architect's fees shall be Eight Percent (8%) of the first Five Hundred Thousand

  Dollars (\$500,000.00), Seven Percent (7%) of the next Five Hundred Thousand Dollars
  (\$500,000.00), Six Percent (6%) of the Cost of Work of the next One Million Dollars (\$1,000,000.00)
  and Five Percent (5%) of the Cost of Work that exceeds Two Million Dollars (\$2,000,000.00).
- For un-accepted Alternates and/or un-accepted Change Orders (required designed services) for the Project, the Architect's Fees shall be through the Bidding or Negotiation (Procurement) Phase as listed below (see para, 11.5 below).
- The Cost of Work shall be based on the amount of the Contract awarded to the Contractor, plus any approved Change Orders. For un-accepted Alternates to the Project, the Cost of Work shall be the amount of the Bid for the un-accepted Alternates of the Contractor on the Job.
- When Multiple Projects (separate bids and separate contracts) are covered by this Agreement, the basis for compensation described will apply to each individual Project and not the sum of all Projects.
- § 11.2 For the Architect's Supplemental Services designated in Section 4.1.1 and for any Sustainability Services required pursuant to Section 4.1.3, the Owner shall compensate the Architect as follows:

  (Insert amount of, or basis for, compensation. If necessary, list specific services to which particular methods of compensation apply.)

# As set forth in 11.7 below.

§ 11.3 For Additional Services that may arise during the course of the Project, including those under Section 4.2, the Owner shall compensate the Architect as follows: (Insert amount of, or basis for, compensation.)

### As set forth in 11.7 below.

§ 11.4 Compensation for Supplemental and Additional Services of the Architect's consultants when not included in Section 11.2 or 11.3, shall be the amount invoiced to the Architect plus ten percent (10%), or as follows: (Insert amount of, or basis for computing, Architect's consultants' compensation for Supplemental or Additional Services.)

§ 11.5 When compensation for Basic Services is based on a stipulated sum or a percentage basis, the proportion of compensation for each phase of services shall be as follows:

Schematic Design Phase	<u>Fifteen</u>	percent (	<u>15</u>	%)
Design Development Phase	<u>Fifteen</u>	percent (	<u>15</u>	%)
Construction Documents	<u>Fifty</u>	percent (	<u>50</u>	%)
Phase		`		
Procurement Phase	<u>Ten</u>	percent (	10	%)
Construction Phase	<u>Ten</u>	percent (	10	%)
		•		,
Total Basic Compensation	one hundred	percent (	100	%)

§ 11.6 When compensation identified in Section 11.1 is on a percentage basis, progress payments for each phase of Basic Services shall be calculated by multiplying the percentages identified in this Article by the Owner's most recent budget for the Cost of the Work. Compensation paid in previous progress payments shall not be adjusted based on subsequent updates to the Owner's budget for the Cost of the Work.

§ 11.6.1 When compensation is on a percentage basis and any portions of the Project are deleted or otherwise not constructed, compensation for those portions of the Project shall be payable to the extent services are performed on those portions. The Architect shall be entitled to compensation in accordance with this Agreement for all services performed whether or not the Construction Phase is commenced.

§ 11.7 The hourly billing rates for services of the Architect and the Architect's consultants are set forth below. The rates shall be adjusted in accordance with the Architect's and Architect's consultants' normal review practices. (If applicable, attach an exhibit of hourly billing rates or insert them below.)

Employee or Category	Rate (\$0.00)
Architect	\$100.00
CAD Operator	\$ 80.00
<u>Clerical</u>	\$ 60.00

### § 11.8 Compensation for Reimbursable Expenses

§ 11.8.1 Reimbursable Expenses are in addition to compensation for Basic, Supplemental, and Additional Services and include expenses incurred by the Architect and the Architect's consultants directly related to the Project, as follows:

- 1 Transportation and authorized out-of-town travel and subsistence:
- Long distance services, dedicated data and communication services, teleconferences, Project web sites and extranets;
- .3 Permitting and other fees required by authorities having jurisdiction over the Project;
- .4 Printing, reproductions, plots, and standard form documents; documents for bidding only;
- .5 Postage, handling, and delivery;
- .6 Expense of overtime work requiring higher than regular rates, if authorized in advance by the Owner,
- .7 Renderings, physical models, mock-ups, professional photography, and presentation materials requested by the Owner or required for the Project; Project (with Owner approval);
- .8 If required by the Owner, and with the Owner's prior written approval, the Architect's consultants' expenses of professional liability insurance dedicated exclusively to this Project, or the expense of additional insurance coverage or limits in excess of that normally maintained by the Architect's consultants;
- .9 All taxes levied on professional services and on reimbursable expenses;
- .10 Site office expenses;
- .11 Registration fees and any other fees charged by the Certifying Authority or by other entities as necessary to achieve the Sustainable Objective; and,

### .12 Other similar Project-related expenditures.

§ 11.8.2 For Reimbursable Expenses the compensation shall be the expenses incurred by the Architect and the Architect's consultants plus Five percent (5)%) of the expenses incurred.

§ 11.9 Architect's Insurance. If the types and limits of coverage required in Section 2.5 are in addition to the types and limits the Architect normally maintains, the Owner shall pay the Architect for the additional coverages as set forth below:

(Insert the additional coverages the Architect is required to obtain in order to satisfy the requirements-set forth in Section 2.5, and for which the Owner shall reimburse the Architect.)

### § 11.10 Payments to the Architect

§ 11.10.1 Initial Payments

§ 11.10.1.1 An initial payment of One Thousand Dollars (\$ 1,000.00) shall be made upon execution of this Agreement and is the minimum payment under this Agreement. It shall be credited to the Owner's account in the final invoice.

§ 11.10.1.2 If a Sustainability Certification is part of the Sustainable Objective, an initial payment to the Architect of (\$[]) shall be made upon execution of this Agreement for registration fees and other fees payable to the Certifying Authority and necessary to achieve the Sustainability Certification. The Architect's payments to the Certifying Authority shall be credited to the Owner's account at the time the expense is incurred.

§ 11.10.2 Progress Payments

§ 11.10.2.1 Unless otherwise agreed, payments for services shall be made monthly in proportion to services performed. Payments are due and payable upon presentation of the Architect's invoice. Amounts unpaid Sixty (60) days after the invoice date shall bear interest at the rate entered below, or in the absence thereof at the legal rate prevailing from time to time at the principal place of business of the Architect.

(Insert rate of monthly or annual interest agreed upon.)

% Prime Rate as established by Bank of America of the time payment is due.

§ 11.10.2.2 The Owner shall not withhold amounts from the Architect's compensation to impose a penalty or liquidated damages on the Architect, or to offset sums requested by or paid to contractors for the cost of changes in the Work, unless the Architect agrees or has been found liable for the amounts in a binding dispute resolution proceeding.

§ 11.10.2.3 Records of Reimbursable Expenses, expenses pertaining to Supplemental and Additional Services, and services performed on the basis of hourly rates shall be available to the Owner at mutually convenient times.

# ARTICLE 12 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Agreement are as follows: (Include other terms and conditions applicable to this Agreement.)

§ 12.1 The Architect shall not be held responsible for actions, misinformation, delays or errors to the extent caused by the Owner or the Owner's Employees, Agents, Contractors or of other Consultants, or by the actions of a governing or reviewing authority which are beyond the control or reasonable anticipation of the Architect or it's consultants. The Architect agrees to perform its services in accordance with a schedule to be mutually agreeable to the parties of the agreement and in manner which complies the applicable federal, state and local laws, statutes, ordinance, codes, rules and regulations.

§ 12.2 Nothing in the agreement will hold the Architect responsible for any existing conditions in an existing building or in existing compliance to any and all applicable laws, statutes, ordinances, codes, orders, rules and regulations in force prior to the date of this agreement or the date of the development of the design documents. Any condition that is brought to the attention of the Architect or is discovered during the development of the documents or construction of the project will be submitted in writing to the Owner for their review and a method of resolving the condition or conditions will be proposed and mutually agreed upon by all affected parties.

### ARTICLE 13 SCOPE OF THE AGREEMENT

§ 13.1 This Agreement represents the entire and integrated agreement between the Owner and the Architect and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the Owner and Architect.

§ 13.2 This Agreement is comprised of the following documents identified below:

- .1 AIA Document B101<sup>TM</sup>-2017, Standard Form Agreement Between Owner and Architect
- .2 AIA Document E203<sup>TM</sup>—2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

(Insert the date of the E203-2013 incorporated into this agreement.)

.3 Exhibits:

(Check the appropriate box for any exhibits incorporated into this Agreement.)

[ ] AIA Document E204<sup>TM</sup>—2017, Sustainable Projects Exhibit, dated as indicated below: (Insert the date of the E204-2017 incorporated into this agreement.)

Other Exhibits incorporated into this Agreement:

(Clearly identify any other exhibits incorporated into this Agreement, including any exhibits and scopes of services identified as exhibits in Section 4.1.2.)

.4 Other documents:

(List other documents, if any, forming part of the Agreement.)

This Agreement entered into as of the day and year first written above.

**OWNER** (Signature)

-Lyn Woolford, Police Chief / City Administrator City of Ashland, Missouri

(Printed name and title)

ARCHITECT (Signature)

Jay D. Berendzen, Architect

Porter, Berendzen & Associates, P.C.

(Printed name, title, and license number, if required)

# **APPENDIX A**

# **BOARD OF APPEALS**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

### SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of the *International Fire Code* pursuant to the provisions of Section 108 of the *International Fire Code*. The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the *fire code official* pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Membership. The membership of the board shall consist of five voting members having the qualifications established by this section. Members shall be nominated by the *fire code official* or the chief administrative officer of the jurisdiction, subject to confirmation by a majority vote of the governing body. Members shall serve without remuneration or compensation, and shall be removed from office prior to the end of their appointed terms only for cause.

- **A101.2.1 Design professional.** One member shall be a practicing design professional registered in the practice of engineering or architecture in the state in which the board is established.
- A101.2.2 Fire protection engineering professional. One member shall be a qualified engineer, technologist, technician or safety professional trained in fire protection engineering, fire science or fire technology. Qualified representatives in this category shall include fire protection contractors and certified technicians engaged in *fire protection system* design.
- A101.2.3 Industrial safety professional. One member shall be a registered industrial or chemical engineer, certified hygienist, certified safety professional, certified hazardous materials manager or comparably qualified specialist experienced in chemical process safety or industrial safety.
- A101.2.4 General contractor. One member shall be a contractor regularly engaged in the construction, *alteration*, maintenance, repair or remodeling of buildings or building services and systems regulated by the code.
- A101.2.5 General industry or business representative. One member shall be a representative of business or industry not represented by a member from one of the other categories of board members described above.
- A101.3 Terms of office. Members shall be appointed for terms of four years. No member shall be reappointed to serve more than two consecutive full terms.

- **A101.3.1 Initial appointments.** Of the members first appointed, two shall be appointed for a term of 1 year, two for a term of 2 years, one for a term of 3 years.
- **A101.3.2 Vacancies.** Vacancies shall be filled for an unexpired term in the manner in which original appointments are required to be made. Members appointed to fill a vacancy in an unexpired term shall be eligible for reappointment to two full terms.
- A101.3.3 Removal from office. Members shall be removed from office prior to the end of their terms only for cause. Continued absence of any member from regular meetings of the board shall, at the discretion of the applicable governing body, render any such member liable to immediate removal from office.
- **A101.4 Quorum.** Three members of the board shall constitute a quorum. In varying the application of any provisions of this code or in modifying an order of the *fire code official*, affirmative votes of the majority present, but not less than three, shall be required.
- **A101.5 Secretary of board.** The *fire code official* shall act as secretary of the board and shall keep a detailed record of all its proceedings, which shall set forth the reasons for its decisions, the vote of each member, the absence of a member and any failure of a member to vote.
- A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.
- **A101.7** Meetings. The board shall meet at regular intervals, to be determined by the chairman. In any event, the board shall meet within 10 days after notice of appeal has been received.
- **A101.8 Conflict of interest.** Members with a material or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- **A101.9 Decisions.** Every decision shall be promptly filed in writing in the office of the *fire code official* and shall be open to public inspection. A certified copy shall be sent by mail or otherwise to the appellant, and a copy shall be kept publicly posted in the office of the *fire code official* for 2 weeks after filing.
- **A101.10 Procedures.** The board shall be operated in accordance with the Administrative Procedures Act of the state in which it is established or shall establish rules and regulations for its own procedure not inconsistent with the provisions of this code and applicable state law.

# **APPENDIX B**

# FIRE-FLOW REQUIREMENTS FOR BUILDINGS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

### SECTION B101 GENERAL

**B101.1 Scope.** The procedure for determining fire-flow requirements for buildings or portions of buildings hereafter constructed shall be in accordance with this appendix. This appendix does not apply to structures other than buildings.

# SECTION B102 DEFINITIONS

**B102.1 Definitions.** For the purpose of this appendix, certain terms are defined as follows:

**FIRE-FLOW.** The flow rate of a water supply, measured at 20 pounds per square inch (psi) (138 kPa) residual pressure, that is available for fire fighting.

FIRE-FLOW CALCULATION AREA. The floor area, in square feet (m<sup>2</sup>), used to determine the required fire flow.

# **SECTION B103 MODIFICATIONS**

**B103.1 Decreases.** The fire chief is authorized to reduce the fire-flow requirements for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements is impractical.

**B103.2 Increases.** The fire chief is authorized to increase the fire-flow requirements where conditions indicate an unusual susceptibility to group fires or conflagrations. An increase shall not be more than twice that required for the building under consideration.

**B103.3** Areas without water supply systems. For information regarding water supplies for fire-fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist, the *fire code official* is authorized to utilize NFPA 1142 or the *International Wildland-Urban Interface Code*.

# SECTION B104 FIRE-FLOW CALCULATION AREA

**B104.1** General. The fire-flow calculation area shall be the total floor area of all floor levels within the *exterior walls*, and under the horizontal projections of the roof of a building, except as modified in Section B104.3.

**B104.2** Area separation. Portions of buildings which are separated by *fire walls* without openings, constructed in accordance with the *International Building Code*, are allowed to be considered as separate fire-flow calculation areas.

**B104.3** Type IA and Type IB construction. The fire-flow calculation area of buildings constructed of Type IA and Type IB construction shall be the area of the three largest successive floors.

**Exception:** Fire-flow calculation area for open parking garages shall be determined by the area of the largest floor.

# SECTION B105 FIRE-FLOW REQUIREMENTS FOR BUILDINGS

B105.1 One- and two-family dwellings. The minimum fire-flow and flow duration requirements for one- and two-family dwellings having a fire-flow calculation area that does not exceed 3,600 square feet (344.5 m²) shall be 1,000 gallons per minute (3785.4 L/min) for 1 hour. Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5 m²) shall not be less than that specified in Table B105.1.

**Exception:** A reduction in required fire-flow of 50 percent, as *approved*, is allowed when the building is equipped with an *approved automatic sprinkler system*.

**B105.2** Buildings other than one- and two-family dwellings. The minimum fire-flow and flow duration for buildings other than one- and two-family *dwellings* shall be as specified in Table B105.1.

**Exception:** A reduction in required fire-flow of up to 75 percent, as *approved*, is allowed when the building is provided with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute (5678 L/min) for the prescribed duration as specified in Table B105.1.

# SECTION B106 REFERENCED STANDARDS

ICC	IBC-09	International Building Code	B104.2, Table B105.1
ICC	IWUIC-09	International Wildland- Urban Interface Code	B103.3
NFPA	. 1142-07	Standard on Water Supplies for Suburban and Rural Fire Fighting	B103.3

TABLE B105.1
MINIMUM REQUIRED FIRE-FLOW AND FLOW DURATION FOR BUILDINGS

		W CALCULATION ARI	EA (square feet)			
Type IA and IB <sup>a</sup>	Type IIA and IIIA <sup>a</sup>	Type IV and V-A	Type IIB and IIIB <sup>a</sup>	Type V-B <sup>a</sup>	FIRE-FLOW (gallons per minute) <sup>b</sup>	FLOW DURATION (hours)
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	
22,701-30,200	12,701-17,000	8,201-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
38,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	2
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	3
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-103,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	103,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43,401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	4
		115,801-125,500	83,701-90,600	51,501-55,700	6,250	
		125,501-135,500	90,601-97,900	55,701-60,200	6,500	
	<del></del>	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
		145,801-156,700	106,801-113,200	64,801-69,600	7,000	
_		156,701-167,900	113,201-121,300	69,601-74,600	7,250	
		167,901-179,400	121,301-129,600	74,601-79,800	7,500	
		179,401-191,400	129,601-138,300	79,801-85,100	7,750	
	-	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

For SI: 1 square foot = 0.0929 m<sup>2</sup>, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

a. Types of construction are based on the *International Building Code*.

b. Measured at 20 psi residual pressure.

# **APPENDIX C**

# FIRE HYDRANT LOCATIONS AND DISTRIBUTION

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

# SECTION C101 GENERAL

**C101.1 Scope.** Fire hydrants shall be provided in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed.

# SECTION C102 LOCATION

**C102.1** Fire hydrant locations. Fire hydrants shall be provided along required fire apparatus access roads and adjacent public streets.

# SECTION C103 NUMBER OF FIRE HYDRANTS

C103.1 Fire hydrants available. The minimum number of fire hydrants available to a building shall not be less than that listed in Table C105.1. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table C105.1 when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted.

# SECTION C104 CONSIDERATION OF EXISTING FIRE HYDRANTS

C104.1 Existing fire hydrants. Existing fire hydrants on public streets are allowed to be considered as available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads.

# SECTION C105 DISTRIBUTION OF FIRE HYDRANTS

**C105.1 Hydrant spacing.** The average spacing between fire hydrants shall not exceed that listed in Table C105.1.

**Exception:** The fire chief is authorized to accept a deficiency of up to 10 percent where existing fire hydrants provide all or a portion of the required fire hydrant service.

Regardless of the average spacing, fire hydrants shall be located such that all points on streets and access roads adjacent to a building are within the distances listed in Table C105.1.

TABLE C105.1 NUMBER AND DISTRIBUTION OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS <sup>a, b, c</sup> (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT <sup>d</sup>
1,750 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more <sup>e</sup>	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

- Reduce by 100 feet for dead-end streets or roads.
- b. Where streets are provided with median dividers which cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.
- . Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
- Reduce by 50 feet for dead-end streets or roads.
- . One hydrant for each 1,000 gallons per minute or fraction thereof.

### APPENDIX D

# FIRE APPARATUS ACCESS ROADS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

# SECTION D101 GENERAL

**D101.1 Scope.** Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *International Fire Code*.

# SECTION D102 REQUIRED ACCESS

**D102.1** Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an *approved* fire apparatus access road with an asphalt, concrete or other *approved* driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

# SECTION D103 MINIMUM SPECIFICATIONS

**D103.1** Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

**D103.2 Grade.** Fire apparatus access roads shall not exceed 10 percent in grade.

**Exception:** Grades steeper than 10 percent as *approved* by the fire chief.

**D103.3 Turning radius.** The minimum turning radius shall be determined by the *fire code official*.

**D103.4 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

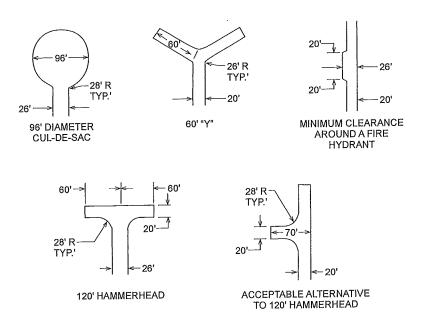
# TABLE D103.4 REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

		7.101.00
LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151–500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot-diameter cul-de-sac in accordance with Figure D103.1
501–750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot-diameter cul-de-sac in accordance with Figure D103.1
Over 750		Special approval required

For SI: 1 foot = 304.8 mm.

**D103.5 Fire apparatus access road gates.** Gates securing the fire apparatus access roads shall comply with all of the following criteria:

- 1. The minimum gate width shall be 20 feet (6096 mm).
- 2. Gates shall be of the swinging or sliding type.



For SI: 1 foot = 304.8 mm.

FIGURE D103.1
DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND

- 3. Construction of gates shall be of materials that allow manual operation by one *person*.
- Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- 5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be *approved* by the *fire code official*.
- 6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.
- 7. Locking device specifications shall be submitted for approval by the *fire code official*.
- 8. Electric gate operators, where provided, shall be *listed* in accordance with UL 325.
- Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

D103.6 Signs. Where required by the *fire code official*, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

### FIGURE D103.6 FIRE LANE SIGNS

**D103.6.1 Roads 20 to 26 feet in width.** Fire apparatus access roads 20 to 26 feet wide (6096 to 7925 mm) shall be posted on both sides as a *fire lane*.

**D103.6.2 Roads more than 26 feet in width.** Fire apparatus access roads more than 26 feet wide (7925 mm) to 32 feet wide (9754 mm) shall be posted on one side of the road as a *fire lane*.

# SECTION D104 COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9144 mm) or

three stories in height shall have at least two means of fire apparatus access for each structure.

**D104.2 Buildings exceeding 62,000 square feet in area.** Buildings or facilities having a gross *building area* of more than 62,000 square feet (5760 m²) shall be provided with two separate and *approved* fire apparatus access roads.

**Exception:** Projects having a gross *building area* of up to 124,000 square feet (11 520 m<sup>2</sup>) that have a single *approved* fire apparatus access road when all buildings are equipped throughout with *approved automatic sprinkler systems*.

**D104.3 Remoteness.** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

# SECTION D105 AERIAL FIRE APPARATUS ACCESS ROADS

**D105.1** Where required. Buildings or portions of buildings or facilities exceeding 30 feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with *approved* fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway.

**D105.2 Width.** Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet (9144 mm) in height.

**D105.3 Proximity to building.** At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building.

# SECTION D106 MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS

**D106.1** Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

**Exception:** Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1 or 903.3.1.2.

**D106.2** Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

# SECTION D107 ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS

**D107.1** One- or two-family dwelling residential developments. Developments of one- or two-family *dwellings* where the number of *dwelling units* exceeds 30 shall be provided with separate and *approved* fire apparatus access roads and shall meet the requirements of Section D104.3.

# **Exceptions:**

- 1. Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the International Fire Code, access from two directions shall not be required.
- 2. The number of *dwelling units* on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the *fire code official*.

# D108 REFERENCED STANDARDS

ASTM F	7 2200-05	Standard Specification for Automated Vehicular Gate Construction	D103.5
ICC	IFC-09	International Fire Code	D101.5, D107.1
UL	325-02	Door, Drapery, Gate, Louver, and Window Operators and Systems, with revisions through February 2006	D103.5

# APPENDIX E HAZARD CATEGORIES

This appendix is for information purposes and is not intended for adoption.

# SECTION E101 GENERAL

**E101.1 Scope.** This appendix provides information, explanations and examples to illustrate and clarify the hazard categories contained in Chapter 27 of the *International Fire Code*. The hazard categories are based upon the DOL 29 CFR. Where numerical classifications are included, they are in accordance with nationally recognized standards.

This appendix should not be used as the sole means of hazardous materials classification.

# SECTION E102 HAZARD CATEGORIES

**E102.1 Physical hazards.** Materials classified in this section pose a *physical hazard*.

E102.1.1 Explosives and blasting agents. The current UN/DOT classification system recognized by international authorities, the Department of Defense and others classifies all explosives as Class 1 materials. They are then divided into six separate divisions to indicate their relative hazard. There is not a direct correlation between the designations used by the old DOT system and those used by the current system nor is there correlation with the system (high and low) established by the Bureau of Alcohol, Tobacco and Firearms (BATF). Table 3304.3 of the International Fire Code provides some guidance with regard to the current categories and their relationship to the old categories. Some items may appear in more than one division, depending on factors such as the degree of confinement or separation, by type of packaging, storage configuration or state of assembly.

In order to determine the level of hazard presented by explosive materials, testing to establish quantitatively their explosive nature is required. There are numerous test methods that have been used to establish the character of an explosive material. Standardized tests, required for finished goods containing explosives or explosive materials in a packaged form suitable for shipment or storage, have been established by UN/DOT and BATF. However, these tests do not consider key elements that should be examined in a manufacturing situation. In manufacturing operations, the condition and/or the state of a material may vary within the process. The in-process material classification and classification requirements for materials used in the manufacturing process may be different from the classification of the same material when found in finished goods depending on the stage of the process in which the material is found. A classification methodology must be used that recognizes the hazards commensurate with the application to the variable physical conditions as well as potential variations of physical character and type of *explosive* under consideration.

Test methods or guidelines for hazard classification of energetic materials used for in-process operations shall be *approved* by the *fire code official*. Test methods used shall be DOD, BATF, UN/DOT or other *approved* criteria. The results of such testing shall become a portion of the files of the jurisdiction and be included as an independent section of any Hazardous Materials Management Plan (HMMP) required by Section 3305.2.1 of the *International Fire Code*. Also see Section 104.7.2 of the *International Fire Code*.

Examples of materials in various Divisions are as follows:

- 1. Division 1.1 (High Explosives). Consists of explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire pile of material instantaneously. Includes substances that, when tested in accordance with approved methods, can be caused to detonate by means of a blasting cap when unconfined or will transition from deflagration to a detonation when confined or unconfined. Examples: dynamite, TNT, nitroglycerine, C-3, HMX, RDX, encased explosives, military ammunition.
- 2. Division 1.2 (Low *Explosives*). Consists of *explosives* that have a projection hazard, but not a mass explosion hazard. Examples: nondetonating encased *explosives*, military ammunition and the like.
- 3. Division 1.3 (Low *Explosives*). Consists of *explosives* that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard. The major hazard is radiant heat or violent burning, or both. Can be deflagrated when confined. Examples: smokeless powder, propellant *explosives*, display fireworks.
- 4. Division 1.4. Consists of *explosives* that pose a minor explosion hazard. The *explosive* effects are largely confined to the package and no projection of fragments of appreciable size or range is expected. An internal fire must not cause virtually instantaneous explosion of almost the entire contents of the package. Examples: squibs (nondetonating igniters), *explosive* actuators, *explosive* trains (low-level detonating cord).
- 5. Division 1.5 (Blasting Agents). Consists of very insensitive *explosives*. This division is comprised of substances which have a mass explosion hazard, but are so insensitive that there is very little probability of initiation or of transition from burning to *detonation* under normal conditions of transport. Materials are not cap sensitive; however, they are mass detonating when provided with sufficient input. Examples: oxi-

dizer and liquid fuel slurry mixtures and gels, ammonium nitrate combined with fuel oil.

6. Division 1.6. Consists of extremely insensitive articles which do not have a mass *explosive* hazard. This division is comprised of articles which contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation or propagation. Although this category of materials has been defined, the primary application is currently limited to military uses. Examples: Low vulnerability military weapons.

Explosives in each division are assigned a compatibility group letter by the Associate Administrator for Hazardous Materials Safety (DOT) based on criteria specified by DOTn 49 CFR. Compatibility group letters are used to specify the controls for the transportation and storage related to various materials to prevent an increase in hazard that might result if certain types of explosives were stored or transported together. Altogether, there are 35 possible classification codes for explosives, e.g., 1.1A, 1.3C, 1.4S, etc.

# E102.1.2 Compressed gases. Examples include:

1. Flammable: acetylene, carbon monoxide, ethane, ethylene, hydrogen, methane. Ammonia will ignite and burn although its flammable range is too narrow for it to fit the definition of "Flammable gas."

For binary mixtures where the hazardous component is diluted with a nonflammable gas, the mixture shall be categorized in accordance with CGA P-23.

- 2. Oxidizing: oxygen, ozone, oxides of nitrogen, chlorine and fluorine. Chlorine and fluorine do not contain oxygen but reaction with flammables is similar to that of oxygen.
- 3. Corrosive: ammonia, hydrogen chloride, fluorine.
- 4. Highly toxic: arsine, cyanogen, fluorine, germane, hydrogen cyanide, nitric oxide, phosphine, hydrogen selenide, stibine.
- 5. Toxic: chlorine, hydrogen fluoride, hydrogen sulfide, phosgene, silicon tetrafluoride.
- 6. Inert (chemically unreactive): argon, helium, krypton, neon, nitrogen, xenon.
- 7. Pyrophoric: diborane, dichloroborane, phosphine, silane.
- 8. Unstable (reactive): butadiene (unstabilized), ethylene oxide, vinyl chloride.

# E102.1.3 Flammable and combustible liquids. Examples include:

1. Flammable liquids.

Class IA liquids shall include those having *flash* points below 73°F (23°C) and having a boiling point at or below 100°F (38°C).

Class IB liquids shall include those having flash points below 73°F (23°C) and having a boiling point at or above 100°F (38°C).

Class IC liquids shall include those having *flash* points at or above 73°F (23°C) and below 100°F (38°C).

### 2. Combustible liquids.

Class II liquids shall include those having *flash* points at or above 100°F (38°C) and below 140°F (60°C).

Class IIIA liquids shall include those having *flash* points at or above 140°F (60°C) and below 200°F (93°C).

Class IIIB liquids shall include those liquids having *flash points* at or above 200°F (93°C).

# E102.1.4 Flammable solids. Examples include:

- Organic solids: camphor, cellulose nitrate, naphthalene.
- 2. Inorganic solids: decaborane, lithium amide, phosphorous heptasulfide, phosphorous sesquisulfide, potassium sulfide, anhydrous sodium sulfide, sulfur.
- 3. Combustible metals (except dusts and powders): cesium, magnesium, zirconium.

**E102.1.5 Combustible dusts and powders.** Finely divided solids which may be dispersed in air as a dust cloud: wood sawdust, plastics, coal, flour, powdered metals (few exceptions).

# E102.1.6 Combustible fibers. See Section 2902.1.

# E102.1.7 Oxidizers. Examples include:

- 1. Gases: oxygen, ozone, oxides of nitrogen, fluorine and chlorine (reaction with flammables is similar to that of oxygen).
- 2. Liquids: bromine, hydrogen peroxide, nitric acid, perchloric acid, sulfuric acid.
- 3. Solids: chlorates, chromates, chromic acid, iodine, nitrates, nitrites, perchlorates, peroxides.

# E102.1.7.1 Examples of liquid and solid oxidizers according to hazard.

Class 4: ammonium perchlorate (particle size greater than 15 microns), ammonium permanganate, guanidine nitrate, hydrogen peroxide solutions more than 91 percent by weight, perchloric acid solutions more than 72.5 percent by weight, potassium superoxide, tetranitromethane.

Class 3: ammonium dichromate, calcium hypochlorite (over 50 percent by weight), chloric acid (10 percent maximum concentration), hydrogen peroxide solutions (greater than 52 percent up to 91 percent), mono-(trichloro)-tetra-(monopotassium dichloro)-penta-s-triazinetrione, nitric acid, (fuming—more than 86 percent concentration), perchloric

acid solutions (60 percent to 72 percent by weight), potassium bromate, potassium chlorate, potassium dichloro-s-triazinetrione (potassium dichloro-isocyanurate), sodium bromate, sodium chlorate, sodium chlorite (over 40 percent by weight) and sodium dichloro-s-triazinetrione (sodium dichloro-isocyanurate).

Class 2: barium bromate, barium chlorate, barium hypochlorite, barium perchlorate, barium permanganate, 1-bromo-3-chloro-5, 5-dimethylhydantoin, calcium chlorate, calcium chlorite, calcium hypochlorite (50 percent or less by weight), calcium perchlorate, calcium permanganate, chromium trioxide (chromic acid), copper chlorate, halane (1, 3-dichloro-5, 5-dimethylhydantoin), hydrogen peroxide (greater than 27.5 percent up to 52 percent), lead perchlorate, lithium chlorate, lithium hypochlorite (more than 39 percent available chlorine), lithium perchlorate, magnesium bromate, magnesium chlorate, magnesium perchlorate, mercurous chlorate, nitric acid (more than 40 percent but less than 86 percent), perchloric acid solutions (more than 50 percent but less than 60 percent), potassium perchlorate, potassium permanganate, potassium peroxide, potassium superoxide, silver peroxide, sodium chlorite (40 percent or less by weight), sodium perchlorate, sodium perchlorate monohydrate, sodium permanganate, sodium peroxide, strontium chlorate, strontium perchlorate, thallium chlorate, trichloro-s-triazinetrione (trichloroisocyanuric acid), urea hydrogen peroxide, zinc bromate, zinc chlorate and zinc permanganate.

Class 1: all inorganic nitrates (unless otherwise classified), all inorganic nitrites (unless otherwise classified), ammonium persulfate, barium peroxide, calcium peroxide, hydrogen peroxide solutions (greater than 8 percent up to 27.5 percent), lead dioxide, lithium hypochlorite (39 percent or less available chlorine), lithium peroxide, magnesium peroxide, manganese dioxide, nitric acid (40 percent concentration or less), perchloric acid solutions (less than 50 percent by weight), potassium dichromate, potassium percarbonate, potassium persulfate, sodium carbonate peroxide, sodium dichloro-s-triazinetrione dihydrate, sodium dichromate, sodium perborate (anhydrous), sodium perborate monohydrate, sodium perborate tetrahydrate, sodium percarbonate, sodium persulfate, strontium peroxide and zinc peroxide.

**E102.1.8 Organic peroxides.** Organic peroxides contain the double oxygen or peroxy (-o-o) group. Some are flammable compounds and subject to explosive decomposition. They are available as:

- 1. Liquids.
- 2. Pastes.
- 3. Solids (usually finely divided powers).

# E102.1.8.1 Classification of organic peroxides according to hazard.

Unclassified: Unclassified organic peroxides are capable of *detonation* and are regulated in accordance with Chapter 33 of the *International Fire Code*.

Class I: acetyl cyclohexane sulfonyl 60-65 percent concentration by weight, fulfonyl peroxide, benzoyl peroxide over 98 percent concentration, t-butyl hydroperoxide 90 percent, t-butyl peroxyacetate 75 percent, t-butyl peroxyisopropylcarbonate 92 percent, diisopropyl peroxydicarbonate 100 percent, di-n-propyl peroxydicarbonate 98 percent, and di-n-propyl peroxydicarbonate 85 percent.

Class II: acetyl peroxide 25 percent, t-butyl hydroperoxide 70 percent (with DTBP and t-BuOH diluents), t-butyl peroxybenzoate 98 percent, t-butyl peroxy-2-ethylhexanoate 97 percent, t-butyl peroxyisobutyrate 75 percent, t-butyl peroxyisopropyl-carbonate 75 percent, t-butyl peroxypivalate 75 percent, dybenzoyl peroxydicarbonate 85 percent, di-sec-butyl peroxydicarbonate 98 percent, di-sec-butyl peroxydicarbonate 75 percent, 1,1-di-(t-butylperoxy)-3,5,5-trimethyecyclohexane 95 percent, di-(2-ethythexyl) peroxydicarbonate 97 percent, 2,5-dymethyl-2-5 di (benzoylperoxy) hexane 92 percent, and peroxyacetic acid 43 percent.

Class III: acetyl cyclohexane sulfonal peroxide 29 percent, benzoyl peroxide 78 percent, benzoyl peroxide paste 55 percent, benzoyl peroxide paste 50 percent peroxide/50 percent butylbenzylphthalate diluent, cumene hydroperoxide 86 percent, di-(4-butylcyclohexyl) peroxydicarbonate 98 percent, t-butyl peroxy-2-ethylhexanoate 97 percent, t-butyl peroxyneodecanoate 75 percent, decanoyl peroxide 98.5 percent, di-t-butyl peroxide 99 percent, 1.1-di-(t-butylperoxy)3,5,5-trimethylcyclohexane 75 percent, 2,4-dichlorobenzoyl peroxide 50 percent, diisopropyl peroxydicarbonate 30 percent, 2,-5-dimethyl-2,5-di-(2-ethylhexanolyperoxy)-hexane 90 percent, 2,5-dimethyl-2,5-di-(t-butylperoxy) hexane 90 percent and methyl ethyl ketone peroxide 9 percent active oxygen diluted in dimethyl phthalate.

Class IV: benzoyl peroxide 70 percent, benzoyl peroxide paste 50 percent peroxide/15 percent water/35 percent butylphthalate diluent, benzoyl peroxide slurry 40 percent, benzoyl peroxide powder 35 percent, t-butyl hydroperoxide 70 percent, (with water diluent), t-butyl peroxy-2-ethylhexanoate 50 percent, decumyl peroxide 98 percent, di-(2-ethylhexal) peroxydicarbonate 40 percent, laurel peroxide 98 percent, p-methane hydroperoxide 52.5 percent, methyl ethyl ketone peroxide 5.5 percent active oxygen and

methyl ethyl ketone peroxide 9 percent active oxygen diluted in water and glycols.

Class V: benzoyl peroxide 35 percent, 1,1-di-t-butyl peroxy 3,5,5-trimethylcyclohexane 40 percent, 2,5-di-(t-butyl peroxy) hexane 47 percent and 2,4-pentanedione peroxide 4 percent active oxygen.

# E102.1.9 Pyrophoric materials. Examples include:

- 1. Gases: diborane, phosphine, silane.
- 2. Liquids: diethylaluminum chloride, diethylberyllium, diethylphosphine, diethylzinc, dimethylarsine, triethylaluminum etherate, triethylbismuthine, triethylboron, trimethylaluminum, trimethylgallium.
- Solids: cesium, hafnium, lithium, white or yellow phosphorous, plutonium, potassium, rubidium, sodium, thorium.

# E102.1.10 Unstable (reactive) materials. Examples include:

Class 4: acetyl peroxide, dibutyl peroxide, dinitrobenzene, ethyl nitrate, peroxyacetic acid and picric acid (dry) trinitrobenzene.

Class 3: hydrogen peroxide (greater than 52 percent), hydroxylamine, nitromethane, paranitroaniline, perchloric acid and tetrafluoroethylene monomer.

Class 2: acrolein, acrylic acid, hydrazine, methacrylic acid, sodium perchlorate, styrene and vinyl acetate.

Class 1: acetic acid, hydrogen peroxide 35 percent to 52 percent, paraldehyde and tetrahydrofuran.

### E102.1.11 Water-reactive materials. Examples include:

Class 3: aluminum alkyls such as triethylaluminum, isobutylaluminum and trimethylaluminum; bromine pentafluoride, bromine trifluoride, chlorodiethylaluminium and diethylzinc.

Class 2: calcium carbide, calcium metal, cyanogen bromide, lithium hydride, methyldichlorosilane, potassium metal, potassium peroxide, sodium metal, sodium peroxide, sulfuric acid and trichlorosilane.

Class 1: acetic anhydride, sodium hydroxide, sulfur monochloride and titanium tetrachloride.

**E102.1.12 Cryogenic fluids.** The cryogenics listed will exist as *compressed gases* when they are stored at ambient temperatures.

- 1. Flammable: carbon monoxide, deuterium (heavy hydrogen), ethylene, hydrogen, methane.
- 2. Oxidizing: fluorine, nitric oxide, oxygen.
- 3. Corrosive: fluorine, nitric oxide.
- 4. Inert (chemically unreactive): argon, helium, krypton, neon, nitrogen, xenon.
- 5. Highly toxic: fluorine, nitric oxide.

**E102.2 Health hazards.** Materials classified in this section pose a *health hazard*.

# E102.2.1 Highly toxic materials. Examples include:

- 1. Gases: arsine, cyanogen, diborane, fluorine, germane, hydrogen cyanide, nitric oxide, nitrogen dioxide, ozone, phosphine, hydrogen selenide, stibine.
- 2. Liquids: acrolein, acrylic acid, 2-chloroethanol (ethylene chlorohydrin), hydrazine, hydrocyanic acid, 2-methylaziridine (propylenimine), 2-methylacetonitrile (acetone cyanohydrin), methyl ester isocyanic acid (methyl isocyanate), nicotine, tetranitromethane and tetraethylstannane (tetraethyltin).
- 3. Solids: (aceto) phenylmercury (phenyl mercuric acetate), 4-aminopyridine, arsenic pentoxide, arsenic trioxide, calcium cyanide, 2-chloroacetophenone, aflatoxin B, decaborane(14), mercury (II) bromide (mercuric bromide), mercury (II) chloride (corrosive mercury chloride), pentachlorophenol, methyl parathion, phosphorus (white) and sodium azide.

### E102.2.2 Toxic materials. Examples include:

- 1. Gases: boron trichloride, boron trifluoride, chlorine, chlorine trifluoride, hydrogen fluoride, hydrogen sulfide, phosgene, silicon tetrafluoride.
- 2. Liquids: acrylonitrile, allyl alcohol, alpha-chlorotoluene, aniline, 1-chloro- 2,3-epoxypropane, chloroformic acid (allyl ester), 3-chloropropene (allyl chloride), o-cresol, crotonaldehyde, dibromomethane, diisopropylamine, diethyl ester sulfuric acid, dimethyl ester sulfuric acid, 2-furaldehyde (furfural), furfural alcohol, phosphorus chloride, phosphoryl chloride (phosphorus oxychloride) and thionyl chloride.
- 3. Solids: acrylamide, barium chloride, barium (II) nitrate, benzidine, p-benzoquinone, beryllium chloride, cadmium chloride, cadmium oxide, chloroacetic acid, chlorophenylmercury (phenyl mercuric chloride), chromium (VI) oxide (chromic acid, solid), 2,4-dinitrotoluene, hydroquinone, mercury chloride (calomel), mercury (II) sulfate (mercuric sulfate), osmium tetroxide, oxalic acid, phenol, P-phenylenediamine, phenylhydrazine, 4-phenylmorpholine, phosphorus sulfide, potassium fluoride, potassium hydroxide, selenium (IV) disulfide and sodium fluoride.

# E102.2.3 Corrosives. Examples include:

- 1. Acids: Examples: chromic, formic, hydrochloric (muriatic) greater than 15 percent, hydrofluoric, nitric (greater than 6 percent, perchloric, sulfuric (4 percent or more).
- 2. Bases (alkalis): hydroxides—ammonium (greater than 10 percent), calcium, potassium (greater than 1 percent); certain carbonates—potassium.

 Other corrosives: bromine, chlorine, fluorine, iodine, ammonia.

**Note:** Corrosives that are oxidizers, e.g., nitric acid, chlorine, fluorine; or are compressed gases, e.g., ammonia, chlorine, fluorine; or are water-reactive, e.g., concentrated sulfuric acid, sodium hydroxide, are physical hazards in addition to being health hazards.

### SECTION E103 EVALUATION OF HAZARDS

**E103.1 Degree of hazard.** The degree of hazard present depends on many variables which should be considered individually and in combination. Some of these variables are as shown in Sections E103.1.1 through E103.1.5.

E103.1.1 Chemical properties of the material. Chemical properties of the material determine self reactions and reactions which may occur with other materials. Generally, materials within subdivisions of hazard categories will exhibit similar chemical properties. However, materials with similar chemical properties may pose very different hazards. Each individual material should be researched to determine its hazardous properties and then considered in relation to other materials that it might contact and the surrounding environment.

E103.1.2 Physical properties of the material. Physical properties, such as whether a material is a solid, liquid or gas at ordinary temperatures and pressures, considered along with chemical properties will determine requirements for containment of the material. Specific gravity (weight of a liquid compared to water) and vapor density (weight of a gas compared to air) are both physical properties which are important in evaluating the hazards of a material.

E103.1.3 Amount and concentration of the material. The amount of material present and its concentration must be considered along with physical and chemical properties to determine the magnitude of the hazard. Hydrogen peroxide, for example, is used as an antiseptic and a hair bleach in low concentrations (approximately 8 percent in water solution). Over 8 percent, hydrogen peroxide is classed as an oxidizer and is toxic. Above 90 percent, it is a Class 4 oxidizer "that can undergo an explosive reaction when catalyzed or exposed to heat, shock or friction," a definition which incidentally also places hydrogen peroxide over 90-percent concentration in the unstable (reactive) category. Small amounts at high concentrations may present a greater hazard than large amounts at low concentrations.

E103.1.3.1 Mixtures. Gases—toxic and highly toxic gases include those gases that have an  $LC_{50}$  of 2,000 parts per million (ppm) or less when rats are exposed for a period of 1 hour or less. To maintain consistency with the definitions for these materials, exposure data for periods other than 1 hour must be normalized to 1 hour. To classify mixtures of *compressed gases* that contain one or more toxic or highly toxic components, the  $LC_{50}$  of the mixture must be determined. Mixtures that contain only two components are binary mixtures. Those that contain more than two components are multicomponent mix-

tures. When two or more hazardous substances (components) having an  $LC_{50}$  below 2,000 ppm are present in a mixture, their combined effect, rather than that of the individual substance components, must be considered. In the absence of information to the contrary, the effects of the hazards present must be considered as additive. Exceptions to the above rule may be made when there is a good reason to believe that the principal effects of the different harmful substances (components) are not additive.

For binary mixtures where the hazardous component is diluted with a nontoxic gas such as an inert gas, the  $LC_{50}$  of the mixture is estimated by use of the methodology contained in CGA P-20. The hazard zones specified in CGA P-20 are applicable for DOTn purposes and shall not be used for hazard classification.

E103.1.4 Actual use, activity or process involving the material. The definition of handling, storage and use in closed systems refers to materials in packages or containers. Dispensing and use in open containers or systems describes situations where a material is exposed to ambient conditions or vapors are liberated to the atmosphere. Dispensing and use in open systems, then, are generally more hazardous situations than handling, storage or use in closed systems. The actual use or process may include heating, electric or other sparks, catalytic or reactive materials and many other factors which could affect the hazard and must therefore be thoroughly analyzed.

**E103.1.5 Surrounding conditions.** Conditions such as other materials or processes in the area, type of construction of the structure, fire protection features (e.g., *fire walls*, sprinkler systems, alarms, etc.), occupancy (use) of adjoining areas, normal temperatures, exposure to weather, etc., must be taken into account in evaluating the hazard.

**E103.2 Evaluation questions.** The following are sample evaluation questions:

- 1. What is the material? Correct identification is important; exact spelling is vital. Check labels, MSDS, ask responsible *persons*, etc.
- 2. What are the concentration and strength?
- 3. What is the physical form of the material? Liquids, gases and finely divided solids have differing requirements for spill and leak control and containment.
- 4. How much material is present? Consider in relation to permit amounts, *maximum allowable quantity per control area* (from Group H occupancy requirements), amounts which require detached storage and overall magnitude of the hazard.
- 5. What other materials (including furniture, equipment and building components) are close enough to interact with the material?
- 6. What are the likely reactions?
- 7. What is the activity involving the material?
- 8. How does the activity impact the hazardous characteristics of the material? Consider vapors released or hazards otherwise exposed.

- 9. What must the material be protected from? Consider other materials, temperature, shock, pressure, etc.
- 10. What effects of the material must people and the environment be protected from?
- 11. How can protection be accomplished? Consider:
  - 11.1. Proper containers and equipment.
  - 11.2. Separation by distance or construction.
  - 11.3. Enclosure in cabinets or rooms.
  - 11.4. Spill control, drainage and containment.
  - 11.5. Control systems—ventilation, special electrical, detection and alarm, extinguishment, explosion venting, limit controls, exhaust scrubbers and excess flow control.
  - 11.6. Administrative (operational) controls—signs, ignition source control, security, personnel training, established procedures, storage plans and emergency plans.

Evaluation of the hazard is a strongly subjective process; therefore, the *person* charged with this responsibility must gather as much relevant data as possible so that the decision will be objective and within the limits prescribed in laws, policies and standards.

It may be necessary to cause the responsible *persons* in charge to have tests made by qualified *persons* or testing laboratories to support contentions that a particular material or process is or is not hazardous. See Section 104.7.2 of the *International Fire Code*.

E103.1.3.1

# E104 REFERENCED STANDARDS

(2003)	Toxic Mixtures	
CGA P-23 (2003)	Standard for Categorizing Gas Mixtures Containing Flammable and Nonflammable Components	E102.1.2
ICC IFC-09	International Fire Code	E101.1, E102.1.1 E102.1.8.1, E103.2

Standard for Classification of

CGA P-20

# APPENDIX F

# HAZARD RANKING

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

# SECTION F101 GENERAL

**F101.1 Scope.** Assignment of levels of hazards to be applied to specific hazard classes as required by NFPA 704 shall be in accordance with this appendix. The appendix is based on application of the degrees of hazard as defined in NFPA 704 arranged by hazard class as for specific categories defined in Chapter 2 of the *International Fire Code* and used throughout.

F101.2 General. The hazard rankings shown in Table F101.2 have been established by using guidelines found within NFPA 704. As noted in Section 4.2 of NFPA 704, there could be specific reasons to alter the degree of hazard assigned to a specific material; for example, ignition temperature, flammable range or susceptibility of a container to rupture by an internal combustion explosion or to metal failure while under pressure or because of heat from external fire. As a result, the degree of hazard assigned for the same material can vary when assessed by different people of equal competence.

The hazard rankings assigned to each class represent reasonable minimum hazard levels for a given class based on the use of criteria established by NFPA 704. Specific cases of use or storage may dictate the use of higher degrees of hazard in certain cases.

# SECTION F102 REFERENCED STANDARDS

ICC IFC-09 International Fire Code

F101.1

NFPA

704-07 Identification of the

Hazards of Materials for Emergency Response F101.1, F101.2

TABLE F101.2
FIRE FIGHTER WARNING PLACARD DESIGNATIONS BASED ON HAZARD CLASSIFICATION CATEGORIES

HAZARD CATEGORY	DESIGNATION
Combustible liquid II	. F2
Combustible liquid IIIA	F2
Combustible liquid IIIB	F1
Combustible dust	F4
Combustible fiber	F3
Cryogenic flammable	F4, H3
Cryogenic oxidizing	OX, H3
Explosive	R4
Flammable solid	F2
Flammable gas (gaseous)	F4
Flammable gas (liquefied)	F4
Flammable liquid IA	F4
Flammable liquid IB	F3
Flammable liquid IC	F3
Organic peroxide, UD	R4
Organic peroxide I	F4, R3
Organic peroxide II	F3, R3
Organic peroxide III	F2, R2
Organic peroxide IV	F1, R1
Organic peroxide V	None
Oxidizing gas (gaseous)	OX
Oxidizing gas (liquefied)	OX
Oxidizer 4	OX 4
Oxidizer 3	OX 3
Oxidizer 2	OX 2
Oxidizer 1	OX 1
Pyrophoric gases	F4
Pyrophoric solids, liquids	F3
Unstable reactive 4D	R4
Unstable reactive 3D	R4
Unstable reactive 3N	R3
Unstable reactive 2	R2
Unstable reactive 1	None
Water reactive 3	W3
Water reactive 2	W2
Corrosive	H3, COR
Toxic	H3
Highly toxic	H4

F-Flammable category.

R-Reactive category.

H—Health category.

W—Special hazard: water reactive.

OX—Special hazard: oxidizing properties.

COR—Corrosive.

UD—Unclassified detonable material.

<sup>4</sup>D—Class 4 detonable material.

<sup>3</sup>D—Class 3 detonable material.

<sup>3</sup>N—Class 3 nondetonable material.

# **APPENDIX G**

# CRYOGENIC FLUIDS—WEIGHT AND VOLUME EQUIVALENTS

This appendix is for information purposes and is not intended for adoption.

### SECTION G101 GENERAL

**G101.1 Scope.** This appendix is used to convert from liquid to gas for *cryogenic fluids*.

**G101.2 Conversion.** Table G101.2 shall be used to determine the equivalent amounts of *cryogenic fluids* in either the liquid or gas phase.

G101,2.1 Use of the table. To use Table G101.2, read horizontally across the line of interest. For example, to determine the number of cubic feet of gas contained in 1.0 gallon (3.785 L) of liquid argon, find 1.000 in the column entitled "Volume of Liquid at Normal *Boiling Point*." Reading across the line under the column entitled "Volume of Gas at 70°F and 1 atmosphere 14.7 psia," the value of 112.45 cubic feet (3.184 m³) is found.

**G101.2.2 Other quantities.** If other quantities are of interest, the numbers obtained can be multiplied or divided to obtain the quantity of interest. For example, to determine the number of cubic feet of argon gas contained in a volume of 1,000 gallons (3785 L) of liquid argon at its normal *boiling point*, multiply 112.45 by 1,000 to obtain 112,450 cubic feet (3184 m<sup>3</sup>).

TABLE G101.2
WEIGHT AND VOLUME EQUIVALENTS FOR COMMON CRYOGENIC FLUIDS

CRYOGENIC WEIGHT OF LIQUID		IQUID OR GAS		QUID AT NORMAL IG POINT	VOLUME OF GAS AT NTP	
FLUID	Pounds	Kilograms	Liters	Gallons	Cubic feet	Cubic meters
	1.000	0.454	0.326	0.086	9.67	. 0.274
	2.205	1.000	0.718	0.190	21.32	0.604 0.841
Argon	3.072	1.393	1.000	0.264	29.71 112.45	3.184
	11.628	5.274	3.785	1.000		2.832
	10.340 3.652	4.690 1.656	3.366 1.189	0.889 0.314	100.00 35.31	1.000
	1.000	0.454	3.631	0.959	96.72	2.739
	2.205	1.000	8.006	2.115	213.23	6.038
Helium	0.275	0.125	1.000	0.264	26.63	0.754
	1.042	0.473	3.785	1.000	100.82	2.855
	1.034	0.469	3.754	0.992	100.00	2.832
	0.365	0.166	1.326	0.350	35.31	1.000
	1.000	0.454	6.409	1.693	191.96	5.436
	2.205	1.000	14.130	3.733	423.20	11.984
TT1	0.156	0.071	1.000	0.264	29.95	0.848
Hydrogen	0.591	0.268	3.785	1.000	113.37	3.210
	0.521	0.236	3.339	0.882	100.00	2.832
	0.184	0.083	1.179	0.311	35.31	1.000
	1.000	0.454	0.397	0.105	12.00	0.342
	2.205	1.000	0.876	0.231	26.62	0.754
	2.517	1.142	1.000	0.264	30.39	0.861
Oxygen	9.527	4.321	3.785	1.000	115.05	3.250
	8.281	3.756	3.290	0.869	100.00	2.832
	2.924	1.327	1.162	0.307	35.31	1.000
	1.000	0.454	0.561	0.148	13.80	0.391
	2.205	1.000	1.237	0.327	30.43	0.862
	1.782	0.808	1.000	0.264	24.60	0.697
Nitrogen	6.746	3.060	3.785	1.000	93.11	2.637
	7.245	3.286	4.065	1.074	100.00	2.832
	2.558	1.160	1.436	0.379	35.31	1.000
	1.000	0.454	1.052	0.278	22.968	0.650
ļ	2.205	1.000	2.320	0.613	50.646	1.434
	0.951	0.431	1.000	0.264	21.812	0.618
LNGa	3.600	1.633	3.785	1.000	82.62	2.340
	4.356	1.976	4.580	1.210	100.00	2.832
	11.501	5.217	1.616	0.427	35.31	1.000

For SI: 1 pound = 0.454 kg, 1 gallon = 3.785 L, 1 cubic foot = 0.02832 m<sup>3</sup>,  $^{\circ}$ C = [( $^{\circ}$ F)-32]/1.8, 1 pound per square inch atmosphere = 6.895 kPa.

a. The values listed for liquefied natural gas (LNG) are "typical" values. LNG is a mixture of hydrocarbon gases, and no two LNG streams have exactly the same composition.

# APPENDIX H

# HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP) AND HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS) INSTRUCTIONS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

# SECTION H101 HMMP

H101.1 Part A (See Example Format in Figure 1).

- 1. Fill out items and sign the declaration.
- 2. Part A of this section is required to be updated and submitted annually, or within 30 days of a process or management change.

# H101.2 Part B-General Facility Description/Site Plan (See Example Format in Figure 2).

1. Provide a site plan on 8-1/2 by 11-inch (215 mm by 279 mm) paper, showing the locations of all buildings, structures, outdoor chemical control or storage and use areas, parking lots, internal roads, storm and sanitary sewers, wells and adjacent property uses. Indicate the approximate scale, northern direction and date the drawing was completed.

# H101.3 Part C-Facility Storage Map-Confidential Information (See Example Format in Figure 3).

- 1. Provide a floor plan of each building identified on the site plan as containing hazardous materials on 8-1/2 by 11-inch (215 mm by 279 mm) paper, identifying the northern direction, and showing the location of each storage and use area.
- Identify storage and use areas, including hazard waste storage areas.
- 3. Show the following:
  - 3.1. Accesses to each storage and use area.
  - 3.2. Location of emergency equipment.
  - 3.3. Location where liaison will meet emergency responders.
  - 3.4. Facility evacuation meeting point locations.
  - 3.5. The general purpose of other areas within the building.
  - 3.6. Location of all aboveground and underground tanks to include sumps, vaults, below-grade treatment systems, piping, etc.
  - 3.7. Show hazard classes in each area.
  - 3.8. Show locations of all H occupancies, control areas, and exterior storage and use areas.
  - 3.9. Show emergency exits.

H101.4 HMMP short form. Facilities with the maximum allowable quantities or less per control area in Tables 2703.1.1(1) through 2703.1.1(4) of the International Fire Code and where the threshold planning quantities at EPA 40 CFR Part 355, Sections 302 and 304 are not exceeded, shall be allowed to file a short-form HMMP which shall include all of the following components:

- 1. General facility information.
- 2. A simple line drawing of the facility showing the location of storage facilities and indicating the hazard class or classes and physical state of the hazardous materials being stored.
- 3. Information that the hazardous materials will be stored and handled in a safe manner and will be appropriately contained, separated and monitored.
- 4. Assurance that security precautions have been taken, employees have been appropriately trained to handle the hazardous materials and react to emergency situations, adequate labeling and warning signs are posted, adequate emergency equipment is maintained and the disposal of hazardous materials will be in an appropriate manner.

# SECTION H102 HMIS

### H102.1 Inventory statement contents.

- HMIS Summary Report (see Example Format in Figure 4).
  - 1.1. Complete a summary report for each control area and Group H occupancy.
  - 1.2. The storage summary report includes the HMIS Inventory Report amounts in storage, use-closed and use-open conditions.
  - 1.3. Provide separate summary reports for storage, useclosed and use-open conditions.
  - 1.4. IBC/IFC Hazard Class.
  - 1.5. Inventory Amount. [Solid (lb), Liquid (gal), Gas (cu ft, gal or lbs)].
  - 1.6. IBC/IFC Maximum Allowable Quantity per control area (MAQ). (If applicable, double MAQ for sprinkler protection and/or storage in cabinets. For wholesale and retail sales occupancies, go to Tables

2703.11.1 and 3404.3.4.1 of the *International Fire Code* for MAQs.).

- 2. HMIS Inventory Report (see Example Format in Figure 5).
  - 2.1. Complete an inventory report by listing products by location.
  - 2.2. Product Name.
  - 2.3. Components. (For mixtures specify percentages of major components if available.)
  - 2.4. Chemical Abstract Service (CAS) Number. (For mixtures list CAS Numbers of major components if available.)
  - 2.5. Location. (Identify the control area or, if it is a Group H occupancy, provide the classification, such as H-2, H-3, etc.)
  - 2.6. Container with a capacity of greater than 55 gallons (208 L). (If product container, vessel or tank could exceed 55 gallons, indicate yes in column.)
  - 2.7. Hazard Classification. (List applicable classifications for each product.)
  - 2.8. Stored. (Amount of product in storage conditions.)
  - 2.9. Closed. (Amount of product in use-closed systems.)
  - 2.10. Open. (Amount of product in use-open systems.)

Facilities which have prepared, filed and submitted a Tier II Inventory Report required by the U.S. Environmental Protection Agency (USEPA) or required by a state which has secured USEPA approval for a similar form shall be deemed to have complied with this section.

# SECTION H103 EMERGENCY PLAN

- 1. Emergency Notification. (See Example Format in Figure 6.)
- 2. Where OSHA or state regulations require a facility to have either an Emergency Action Plan (EAP) or an Emergency Response Plan (ERP), the EAP or ERP shall be included as part of the HMMP.

# SECTION H104 REFERENCED STANDARDS

EPA 40 CFR Part 355—2008	Emergency Planning and Notification	H101.4
ICC IBC-09	International Building Code	H102.1
ICC IFC-09	International Fire Code	H101.4, H102.1

# FIGURE 1 HAZARDOUS MATERIALS MANAGEMENT PLAN SECTION I: FACILITY DESCRIPTION

Phone:Phone:Phone	
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	oer
Phone	
	-
	Phone

# FIGURE 2 HAZARDOUS MATERIALS MANAGEMENT PLAN SECTION I: FACILITY DESCRIPTION

# FIGURE 3 HAZARDOUS MATERIALS MANAGEMENT PLAN

# SECTION I: FACILITY DESCRIPTION PART C—FACILITY MAP

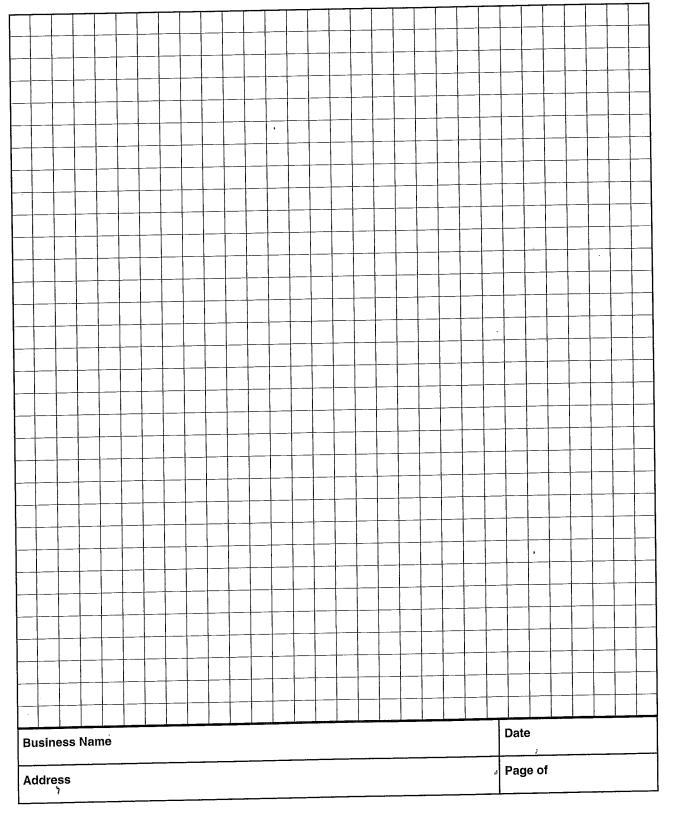


FIGURE 4
SECTION II — HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS) HMIS SUMMARY REPORT<sup>a</sup>
(Storage<sup>b</sup> Conditions)<sup>c</sup>

IBC/IFC HAZARD CLASS	HAZARD CLASS		INVENTORY AMOU	JNT	IBC/IFC MAX	IBC/IFC MAXIMUM ALLOWABLE QUANTITY				
	(Abbrev)	Solid (lb)	Liquid (gal)	Gas (cu ft, gal, lb)	Solid (lb)	Liquid (gal)	Gas (cu ft, gal l			
Combustible Liquid	C2		5			120	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	C3A					330				
	СЗВ		6			13200				
Combustible Fiber	Loose Baled									
Cryogenics, Flammable	CryO-Flam					45				
Cryogenic, Oxidizing	CryO-OX					45				
Flammable Gas	FLG									
(Gaseous)				150			4000			
(Liquefied)				750		30	1000			
Flammable Liquid	FIA									
	F1B & F1C		5			30				
Combination (1A, 1)			5			120				
						120				
Flammable Solid	FLS				125					
Organic Peroxide	OPU				0					
	OP1				5					
	OP2				50					
	OP3				125					
	OP4				NL NL					
	OP5				NL					
xidizer	OX4									
	OX3				0					
	OX2				10					
	OX1				250					

a. Complete a summary report for each control area and H occupancy.

b. Storage = storage + use-closed + use-open systems

c. Separate reports are required for use-closed and use-open systems

d. Include increases for sprinklers or storage in cabinets, if applicable.

<sup>(</sup>This is an example; add additional hazard classes as needed.)

FIGURE 5
SECTION II — HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS) HMIS INVENTORY REPORT
(Sort Products Alphabetically by Location of Product and then Alphabetically by Product Name)

		ts Aipnab	choung 2					1 11,677.4.1.	1	, , , , , , , , , , , , , , , , , , , ,	1			
Product Name (Components) <sup>c</sup>	CAS Number	Location <sup>a</sup>	Container > 55 gal <sup>b</sup>	Haz Class 1	Haz Class 2	Haz Class 3	Stored (lbs)	Stored (gal)	Stored (gas) <sup>d</sup>	Closed (bls)	Cloxed (gal)	Closed gas <sup>d</sup>	Open (lbs)	Open (gal)
ACETYLENE (Acetylene gas)	74-86-2	Control Area 1		FLG	UR2				150					
BLACK AEROSOL SPRAY PAINT (Mixture)	Mixture	Control Area 1		A-L3			24							
GASOLINE, UNLEADED (Gasoline-Mixture) Methyl-t-Butyl-Ether- 15% Diisopropyl Ether-7% Ethanol-11% Toluene-12% Xylene-11%	8006-61-9 1634-04-4 108-20-3 64-17-5 108-88-3 1330-20-7	Control Area 1		F1B				5						
MOTOR OIL-10W40 (Hydrotreated Heavy Paraffinic Distillate- 85%; Additives-20%)	64742-54-7 Mixture	Control Area 1		СЗВ				3						
DIESEL (Diesel-99-100%; Additives)	68476-34-6 Proprietary	Control Area 2	Yes	C2				225						
TRANSMISSION FLUID (Oil-Solvent-Neutral; Performance Additives)	64742-65-0	Control Area 2		СЗВ				3						
OXYGEN, GAS (Oxygen)	7782-44-7	H-3		OXG					5000					

a. Identify the control area or, if it is an H occupancy, provide the classification, such as H-2, H-3, etc.

(This is an example; add additional hazard classes as needed.)

b. If the product container, vessel, or tank could exceed 55 gallons, indicate yes in the column.

c. Specify percentages of main components if available.

d. In cubic feet, gallons, or pounds.

# FIGURE 6 HAZARDOUS MATERIALS MANAGEMENT PLAN SECTION III: EMERGENCY PLAN

In the event of an emergency, the following shall be notified:     a. Facility Liaison								
Name	Title	Home Phone	Cell Phone					
·								
b. Agency								
Agency	Contact	Phone Number						
Fire Department								
LEPC								
Other								

# PROPOSED AMENDMENTS TO CHAPTER 10-SECTION 10.065 AND CHAPTER 11-SECTION 11.190

# Added language is underlined

### **Current Code:**

# 10.065. Plat review mandated

When the Planning Commission of Ashland adopts a city plan which includes at least a major street plan or progresses on its city planning to the making and adoption of a major street plan, and files a certified copy of the major street plan in the office of the County Recorder of Boone County, no plat of a subdivision of land lying within the city shall be filed or recorded until it has been submitted to and a report and recommendation thereon made by the Commission to the Board of Aldermen and the Board has approved the plat as provided by law.

# **Proposed Code:**

When the Planning Commission of Ashland adopts a city plan which includes at least a major street plan or progresses on its city planning to the making and adoption of a major street plan, and files a certified copy of the major street plan in the office of the County Recorder of Boone County, no plat of a subdivision of land lying within the city shall be filed or recorded until it has been submitted to and a report and recommendation thereon made by the Commission to the Board of Aldermen and the Board has approved the plat as provided by law. No plat of a subdivision of land lying within the city shall be filed or recorded until it has been submitted to and a report and recommendation thereon made by the Commission to the Board of Aldermen and the board has approved the plat as provided by law, and all costs and fees incurred by the City in having the application reviewed by outside providers as called for in 11.133, have been reimbursed by the applicant.

# **Current Code:**

# 11.190. Certification of final plat by Mayor

Certification of the final plat approval to be signed by the Mayor and attested to by the City Clerk.

# **Proposed Code:**

Certification of the final plat approval to be signed by the Mayor and attested to by the City Clerk. Notwithstanding the foregoing, the final plat approval shall not be signed and the seal of the city shall not be affixed to the plat, until all costs and fees incurred by the City in having the application reviewed by outside providers as called for in 11.133, have been reimbursed by the applicant.