AGENDA
BOARD OF CITY COMMISSIONERS
April 4, 2022 AT 6:00 P.M.
COMMISSION CHAMBERS AT CITY HALL
16 WEST 9TH STREET
SHAWNEE, OKLAHOMA

Official action can only be taken on items which appear on the agenda. The public body may adopt, approve, ratify, deny, defer, recommend, amend, strike, or continue any agenda item. When more information is needed to act on an item, the public body may refer the matter to Staff or back to Committee or the recommending body. Under certain circumstances, items are deferred to a future date or stricken from the agenda entirely.

CALL TO ORDER

DECLARATION OF A QUORUM

INVOCATION

FLAG SALUTE

1. Citizens Participation

   (A three minute limit per person)
   (A twelve minute limit per topic)

2. Consider approval of Consent Agenda:

   a. Minutes from the March 21, 2022 regular meeting.

   b. Acceptance of the public improvements for Wolverine Industrial Park and place maintenance bonds into effect.

3. Presentation by Animal Control to present the Pet of the Week.

4. Mayor's Proclamations:

   "Fair Housing Month"
   April 2022

   "National Public Safety Telecommunications Week"
   April 10th – 16th, 2022

   "National Donate Life Month"
   April 2022

5. Consideration of a loan agreement and purchase of Motorola radios for the Fire Department.

6. Consideration and possible action of an ordinance regarding an amendment to the City of Shawnee Plan adopting the revised and restated OkMRF (Oklahoma Municipal Retirement Fund) Master Defined Contribution Retirement Plan.

7. Consideration and possible action of an ordinance regarding an amendment to the City of Shawnee Management Plan adopting the revised and restated OkMRF (Oklahoma Municipal Retirement Fund) Master Defined Contribution Retirement Plan.

8. Consideration and possible action of an ordinance regarding an amendment to the City of Shawnee Special Incentive CMO Plan adopting the revised and restated OkMRF (Oklahoma Municipal Retirement Fund) Master Defined Contribution Retirement Plan.

9. Consideration of a resolution declaring certain City of Shawnee property surplus and no longer needed for city purposes; describing said items; and authorizing the sale of said items at the City of Shawnee's discretion.

10. Consider Bids:

    a. Kids Space Park Improvements Project (Award)

11. Administrative Reports

    a. Progress report for the Love Your Block program – Rian Harkins, Community Development Director

12. New Business

    (Any matter not known or which could not have been reasonably foreseen prior to the posting of the agenda)

13. Commissioners Comments

14. Adjournment

Respectfully submitted,

Lisa Lasyone, CMC, City Clerk

The City of Shawnee encourages participation from its citizens in public meetings. If participation is not possible due to a disability, notify the City Clerk, in writing, at least forty-eight hours prior to the scheduled meeting and necessary accommodations will be made. (ADA 28 CFR/36)

Regular Board of Commissioners **2. a.**

Meeting Date: 04/04/2022
Minutes
Submitted By: Kacie Eck, City Clerk
Department: City Clerk

Information

Title of Item for Agenda
Minutes from the March 21, 2022 regular meeting.

Attachments

Minutes

BOARD OF CITY COMMISSIONERS PROCEEDINGS
MARCH 21, 2022 AT 6:00 P.M.

The Board of City Commissioners of the City of Shawnee, County of Pottawatomie, State of Oklahoma, met in Regular Session in the Commission Chambers at City Hall, 16 West 9th Street, Shawnee, Oklahoma on, Monday, March 21, 2022 at 6:00 p.m., pursuant to notice duly posted as prescribed by law at 4:45 p.m. on March 17, 2022. Mayor Bolt presided and Miss Elaina Rao called the meeting to order. Upon roll call, the following members were in attendance.

Ed Bolt
Mayor

Daniel Matthews
Commissioner Ward 1

Cami Engles
Commissioner Ward 2

Travis Flood
Commissioner Ward 3

Darren Rutherford
Commissioner Ward 4-Vice Mayor

Mark Sehorn
Commissioner Ward 5

Ben Salter
Commissioner Ward 6

ABSENT: None

INVOCATION — Commissioner Flood

FLAG SALUTE

AGENDA ITEM NO. 1: Presentation of Certificate of Recognition of Shawnee High School Swim Team's State Championship win.

Mayor Bolt presented Coach Valarie Colburn and the Shawnee High School Swim Team with Certificates of Recognition.

AGENDA ITEM NO. 2: Presentation of Certificate of Recognition of 2022 "If I Were Mayor" Essay 2nd Place Winner.

Mayor Bolt presented Miss Elaina Rao with a Certificate of Recognition.

DRAFT

AGENDA ITEM NO. 3: Citizens Participation
(A three-minute limit per person)
(A twelve-minute limit per topic)

Mr. Gary Dowdy spoke regarding sidewalks.

Mr. Rob Morris spoke regarding Citizens Participation and the mediation between the City of Shawnee, Pottawatomie County, and the Shawnee Civic and Cultural Development Authority.

Mr. Todd Tramel spoke regarding Agenda Item No. 8.

Ms. Jo Davis spoke regarding bed and breakfasts at the Shawnee Twin Lakes.

AGENDA ITEM NO. 4: Consider approval of Consent Agenda:

a. Acknowledge staff will proceed in the instant meeting with the opening and consideration of bids as set forth in Agenda Item No. 12.

b. Minutes from the March 7, 2022 regular meeting.

c. Acknowledge the following minutes and reports:

- Planning Commission Minutes from the February 2, 2022 regular meeting
- License Payment Report for February 2022
- Project Payment Report for February 2022

d. Acceptance of an electric utility easement from OG&E (Oklahoma Gas and Electric Company) to the City of Shawnee/Shawnee Urban Renewal Authority.

e. Mayor's Appointments:

Community Service Contract Review Committee
Monty Porter 1st Partial Term Expires: January 1, 2024
Replaces Erica Bass – Resigned

DRAFT

A motion was made by Commissioner Matthews, seconded by Commissioner Sehorn, to approve Consent Agenda Item Nos. 4(a-e). Motion carried 7-0.

AYE: Mathews, Sehorn, Salter, Engles, Flood, Bolt, Rutherford
NAY: None

AGENDA ITEM NO. 5: Presentation by Animal Control to present the Pet of the Week.

There was no Pet of the Week.

AGENDA ITEM NOS. 16 AND 17 WERE MOVED BEFORE AGENDA ITEM NO. 6 BY THE POWER OF THE CHAIR.

AGENDA ITEM NO. 16: Discussion, consideration, and possible action to enter into executive session for discussion related to the employment of Lowrey Robert Holland in accordance with 25 O.S. § 307(B)(1) "Discussing the employment, hiring, appointment, promotion, demotion, disciplining, or resignation of any individual salaried public officer or employee".

A motion was made by Commissioner Matthews, seconded by Vice Mayor Rutherford, to enter into executive session for discussion related to the employment of Lowrey Robert Holland in accordance with 25 O.S. § 307(B)(1) "Discussing the employment, hiring, appointment, promotion, demotion, disciplining, or resignation of any individual salaried public officer or employee". Motion carried 7-0.

AYE: Matthews, Rutherford, Sehorn, Salter, Engles, Flood, Bolt
NAY: None

COMMISSIONERS ENTERED INTO EXECUTIVE SESSION AT 6:17 P.M. WITH ALL MEMBERS PRESENT.

COMMISSIONERS RECONVENED FROM EXECUTIVE SESSION AT 6:35 P.M. WITH ALL MEMBERS PRESENT.

DRAFT

AGENDA ITEM NO. 17: Consider matters discussed in executive session for discussion related to the employment of Lowrey Robert Holland in accordance with 25 O.S. § 307(B)(1) "Discussing the employment, hiring, appointment, promotion, demotion, disciplining, or resignation of any individual salaried public officer or employee".

A motion was made by Commissioner Flood, seconded by Commissioner Engles, to approve staff's recommendation related to the employment of Lowrey Robert Holland. Motion carried 7-0.

AYE: Flood, Engles, Bolt, Rutherford, Sehorn, Salter, Matthews
NAY: None

AGENDA ITEM NO. 6: Consideration of an amended contract with Meshek and Associates, LLC for the Right-of-Way Acquisition for the MacArthur Street Sidewalk Project.

City Engineer Seth Barkhimer provided a staff report and advised that Staff recommends approval of this item.

A motion was made by Commissioner Matthews, seconded by Vice Mayor Rutherford, to approve an amended contract with Meshek and Associates, LLC for the Right-of-Way Acquisition for the MacArthur Street Sidewalk Project. Motion carried 7-0.

AYE: Matthews, Rutherford, Sehorn, Salter, Engles, Flood, Bolt
NAY: None

AGENDA ITEM NO. 7: Public hearing and consideration of an ordinance to rezone property located at 16712 Magnino Road from A-1 (Rural Agricultural District) to A-1 (Rural Agricultural District) with a Conditional Use Permit (CUP) for a guest cottage. Case No. CUP01-22, Applicant: Lora Davis and James Hunter.

DRAFT

Community Development Director Rian Harkins explained the applicants are requesting to remodel an existing structure that is currently a workshop into a guest cottage. He stated Staff and the Planning Commission recommend approval of the Conditional Use Permit.

Mayor Bolt declared a public hearing in session to consider an ordinance rezoning property located at 16712 Magnino Road from A-1 (Rural Agricultural District) to A-1 (Rural Agricultural District) with a Conditional Use Permit (CUP). No one appeared in favor or against said rezoning. The public hearing was closed.

A motion was made by Commissioner Flood, seconded by Commissioner Engles, to approve the ordinance rezoning property located at 16712 Magnino Road from A-1 (Rural Agricultural District) to A-1 (Rural Agricultural District) with a Conditional Use Permit (CUP).

Ordinance No. 2749NS was introduced.

AN ORDINANCE CONCERNING THE ZONING CLASSIFICATION OF THE FOLLOWING DESCRIBED PROPERTY LOCATED WITHIN THE CORPORATE LIMITS OF THE CITY OF SHAWNEE, POTTAWATOMIE COUNTY, OKLAHOMA, TO-WIT: LOT FIVE (5), JOHNSTON TRACT (LAKE LOT LEASE); FROM ZONING CLASSIFICATION A-1 (RURAL AGRICULTURAL DISTRICT) TO A-1 (RURAL AGRICULTURAL DISTRICT) WITH A CONDITIONAL USE PERMIT (CUP) AND AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF SHAWNEE ACCORDINGLY.

Motion carried 7-0.

AYE: Flood, Engles, Bolt, Rutherford, Sehorn, Salter, Matthews
NAY: None

Ordinance No. 2749NS was adopted by the City Commission.

AGENDA ITEM NO. 8: Public hearing and consideration of an ordinance to rezone property located at 603 West Independence Street from C-3 (Highway Commercial District) to C-3 (Highway Commercial District) with a Conditional Use Permit (CUP) for a crematorium. Case No. CUP02-22, Applicant: Todd Tramel, AE Funeral Services, LLC.

DRAFT

Community Development Director Rian Harkins provided a staff report. He advised Staff and the Planning Commission recommend approval of the Conditional Use Permit.

Mayor Bolt declared a public hearing in session to consider an ordinance rezoning property located at 603 West Independence Street from C-3 (Highway Commercial District) to C-3 (Highway Commercial District) with a Conditional Use Permit (CUP). No one appeared in favor or against said rezoning. The public hearing was closed.

A motion was made by Commissioner Engles, seconded by Vice Mayor Rutherford, to approve the ordinance rezoning property located at 603 West Independence Street from C-3 (Highway Commercial District) to C-3 (Highway Commercial District) with a Conditional Use Permit (CUP).

Ordinance No. 2750NS was introduced.

AN ORDINANCE CONCERNING THE ZONING CLASSIFICATION OF THE FOLLOWING DESCRIBED PROPERTY LOCATED WITHIN THE CORPORATE LIMITS OF THE CITY OF SHAWNEE, POTTAWATOMIE COUNTY, OKLAHOMA, TO-WIT: LOT TWO (2), BLOCK ONE (1), SHAWNEE INDUSTRIAL PARK ADDITION; FROM ZONING CLASSIFICATION C-3 (HIGHWAY COMMERCIAL DISTRICT) TO C-3 (HIGHWAY COMMERCIAL DISTRICT) WITH A CONDITIONAL USE PERMIT (CUP) AND AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF SHAWNEE ACCORDINGLY.

Motion carried 6-0-1.

AYE: Engles, Rutherford, Salter, Matthews, Flood, Bolt
NAY: None
ABSTAIN: Sehorn

Ordinance No. 2750NS was adopted by the City Commission.

AGENDA ITEM NO. 9: Public hearing and consideration of an ordinance to rezone property located near East 45th Street and Sydney Drive from R-1 (Single Family Residential District) to R-3 (Multifamily Residential District). Case No. RZ04-22, Applicant: Brenda Wyatt.

Community Development Director Rian Harkins explained the applicant is looking into a series of duplexes and triplexes. He stated Staff and the Planning Commission recommend approval of the rezoning.

DRAFT

Mayor Bolt declared a public hearing in session to consider an ordinance rezoning property located near East 45th Street and Sydney Drive from R-1 (Single Family Residential District) to R-3 (Multifamily Residential District). Mr. Mike Mitscher appeared in favor of said rezoning. Ms. Liz Konecki, Mr. Alan Rogers, Ms. Mary Virden appeared against said rezoning. The public hearing was closed.

Discussion was held among the Commission.

A motion was made by Commissioner Matthews, seconded by Commissioner Sehorn, to deny rezoning property located near East 45th Street and Sydney Drive from R-1 (Single Family Residential District) to R-3 (Multifamily Residential District). Motion carried 7-0.

AYE: Matthews, Sehorn, Salter, Engles, Flood, Bolt, Rutherford
NAY: None

AGENDA ITEM NO. 10: Consideration of an ordinance of the City of Shawnee, Oklahoma amending portions of Chapter 16 (Lakes), Article II (Twin Lakes) of the Shawnee Municipal Code; providing for severability, codification, and repealer; and declaring an emergency. *(Deferred from the March 7, 2022 City Commission meeting.)*

City Attorney Joe Vorndran provided a staff report.

A motion was made by Vice Mayor Rutherford, seconded by Commissioner Sehorn, to approve an ordinance creating, amending, and repealing portions of Chapter 16 (Lakes), Article II (Twin Lakes) of the Shawnee Municipal Code; providing for severability, codification, and repealer; with specific amendment by interlineation to Section 16-229(c) adding after water skiing: wake boarding, surfing, knee boarding, and other forms of towables are prohibited on the waters of Twin Lakes No. 2.

Ordinance No. 2751NS was introduced.

AN ORDINANCE OF THE CITY OF SHAWNEE, OKLAHOMA CREATING, AMENDING, AND REPEALING PORTIONS OF CHAPTER 16 (LAKES), ARTICLE II (TWIN LAKES) OF THE SHAWNEE MUNICIPAL CODE; PROVIDING FOR SEVERABILITY, CODIFICATION, AND REPEALER; AND DECLARING AN EMERGENCY.

Motion carried 7-0.

DRAFT

AYE: Rutherford, Sehorn, Salter, Matthews, Engles, Flood, Bolt
NAY: None

Ordinance No. 2751NS was adopted by the City Commission.

A motion was made by Commissioner Matthews, seconded by Vice Mayor Rutherford, to approve the emergency clause relating to Ordinance No. 2751NS. Motion carried 7-0.

AYE: Matthews, Rutherford, Sehorn, Salter, Engles, Flood, Bolt
NAY: None

AGENDA ITEM NO. 11: Consideration of a budget amendment for Fund 106 Hotel/Motel Surcharge Fund to appropriate fund balance for payment on Pottawatomie County Historical Society Agreement – Third Year Annual Fee.

Assistant Finance Director Jacob Bussell provided a staff report.

A motion was made by Commissioner Sehorn, seconded by Vice Mayor Rutherford, to approve a budget amendment for Fund 106 Hotel/Motel Surcharge Fund. Motion carried 7-0.

AYE: Sehorn, Rutherford, Salter, Matthews, Engles, Flood, Bolt
NAY: None

AGENDA ITEM NO. 12: Consider Bids:

a. Kids Space Park Improvements Project (Open)

BIDDER	**AMOUNT**
Rudy Construction Co. Oklahoma City, Oklahoma	$4,019,314.00
Additional Alternate No. 1a	$5,000.00
Additional Alternate No. 1b	$23,340.00
Additional Alternate No. 2	$20,000.00
Additional Alternate No. 3	$21,000.00
Additional Alternate No. 4	$16,500.00

DRAFT

Bruce Johnson Construction	$3,387,382.10
Additional Alternate No. 1a	$4,500.00
Additional Alternate No. 1b	$32,503.00
Additional Alternate No. 2	$19,000.00
Additional Alternate No. 3	$20,000.00
Additional Alternate No. 4	$4,500.00
Wynn Construction Co. Inc.	$4,506,306.00
Oklahoma City, Oklahoma	
Additional Alternate No. 1a	$6,000.00
Additional Alternate No. 1b	$25,674.00
Additional Alternate No. 2	$31,000.00
Additional Alternate No. 3	$30,000.00
Additional Alternate No. 4	$24,000.00
Shiloh Enterprise Inc.	$3,615,395.00
Edmond, Oklahoma	
Additional Alternate No. 1a	$3,200.00
Additional Alternate No. 1b	$23,500.00
Additional Alternate No. 2	$29,000.00
Additional Alternate No. 3	$29,000.00
Additional Alternate No. 4	$19,000.00
Lambert Construction	$3,552,795.00
Stillwater, Oklahoma	
Additional Alternate No. 1a	$3,177.00
Additional Alternate No. 1b	$23,643.00
Additional Alternate No. 2	$27,909.00
Additional Alternate No. 3	$26,938.00
Additional Alternate No. 4	$11,825.00
Downey Construction, LLC	$4,199,401.00
Oklahoma City, Oklahoma	
Additional Alternate No. 1a	$500.00
Additional Alternate No. 1b	$24,507.00
Additional Alternate No. 2	$20,000.00
Additional Alternate No. 3	$22,000.00
Additional Alternate No. 4	$20,400.00

DRAFT

Public Works Director Brad Schmidt read six (6) bids into the record. Mr. Schmidt requested the bid award be deferred to a future meeting.

A motion was made by Commissioner Flood, seconded by Vice Mayor Rutherford, to defer the bid award to a future City Commission meeting. Motion carried 7-0.

AYE: Flood, Rutherford, Sehorn, Slater, Matthews, Engles, Bolt
NAY: None

AGENDA ITEM NO. 13: Acknowledge monthly Sales Tax and Budget Reports.

Assistant Finance Director Jacob Bussell reported sales tax is up $2,553,466.00, or 15.60%, over the projected budget year-to-date. He stated that use tax collections are up approximately $538,683.00, or 28.95%, over the projected budget year-to-date.

AGENDA ITEM NO. 14: New Business (Any matter not known, or which could not have been reasonably foreseen prior to the posting of the agenda.)

There was no New Business.

AGENDA ITEM NO. 15: Commissioners Comments

The Commission thanked City Attorney Joe Vorndran for his work on the lake regulations.

Commissioner Sehorn thanked Assistant Finance Director Jacob Bussell for the Staff report he provided.

Vice Mayor Rutherford explained why the Commission moved agenda items and entered into executive session early.

Commissioner Flood spoke regarding the Kids Space Park Improvement Project, the Shawnee High School Swim Team, and the “If I Were Mayor” essay winner.

DRAFT

Commission Engles spoke regarding the Shawnee High School Swim Team, "If I Were Mayor" Essay Winner, Citizen Participation participants, advisory board volunteers, the Lake Advisory Committee, and the Potawatomi Fire Basketball Team.

Commissioner Engles expressed her excitement to see movement toward quality-of-life improvement.

Commissioner Matthews spoke regarding the Shawnee High School Swim Team, "If I Were Mayor" Essay Winner, the Lake Advisory Committee, and the Potawatomi Fire Basketball Team.

Commissioner Matthews addressed Mr. Dowdy and Mr. Morris' concerns from Citizens Participation.

Mayor Bolt spoke regarding he lake regulations and the Potawatomi Fire Basketball Team.

Mayor Bolt thanked Mr. Dowdy for his comments during Citizens Participation.

AGENDA ITEM NO. 18: Adjournment

There being no further business to be considered, the meeting was adjourned by power of the Chair. (7:39 p.m.)

_____

ED BOLT, MAYOR

ATTEST:

_____

LISA LASYONE, CMC, CITY CLERK

DRAFT

Regular Board of Commissioners **2. b.**

Meeting Date: 04/04/2022

Maintenance Bond

Submitted By: Kacie Eck, City Clerk

Department: City Clerk

Information

Title of Item for Agenda

Acceptance of the public improvements for Wolverine Industrial Park and place maintenance bonds into effect.

Attachments

Memo

Bond

Office of Engineering

222 N. Broadway Ave.
Shawnee, OK 74801
ShawneeOK.org

Date: April 4, 2022

To: City Commission

From: Seth Barkhimer

Subject: Wolverine Industrial Park – Acceptance of Public Improvements

Background:

The public improvements associated with the Wolverine Industrial Park have been completed and are ready to be accepted by the City. The development is located on Wolverine Road between Kickapoo and Harrison. The developer paid 100% of the construction costs. The improvements have all been installed satisfactorily and inspected to the City of Shawnee specifications. The utilities passed all required testing and are now ready for acceptance and to place the maintenance bonds into effect.

Financial Impact: N/A

Attachment: Maintenance Bonds

Staff Recommendation: Acceptance of the improvements.

MAINTENANCE BOND

#GR52185

KNOW ALL MEN BY THESE PRESENTS:

That M & J Constructors, LLC, 16759 County Road 3520, Ada OK 74820,

as Principal, and Granite Re, Inc., 14001 Quailbrook Dr., Oklahoma City, OK 73134,

a corporation organized under the laws of the State of Illinois and authorized to transact

business in the State of Oklahoma, as Surety, are held and firmly bound unto the Shawnee Municipal Authority/City of Shawnee, Benificiary in penal sum of ***Two Hundred Twenty Three Thousand Six Hundred Thirty Five & 00/100*** Dollars ($ 223,635.00) lawful money of the United States of America, said sum being equal to one hundred percent (100%) of the total contract price for the first (1) year, ten percent (10%) for one (1) year after completion and final acceptance (total of 2 years maintenance), for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents.

NOW, THEREFORE, if said Principal shall pay or cause to be paid to the Shawnee Municipal Authority/City Of Shawnee Beneficiary all damages, loss, and expense which may result by reason of defective materials and/or workmanship in connection with said work, occurring within a period of two (2) years ({one hundred (100%) percent for first year, ten (10%) for one year thereafter, of total contract price} for all projects for the construction of utilities) from and after acceptance of said project by the Shawnee Municipal Authority/City of Shawnee Beneficiary; and if Principal shall pay or cause to be paid all labor and materials, including the prime contractor and all subcontractors; and if principal shall save and hold Shawnee Municipal Authority/City of Shawnee Beneficiary harmless from all damages, loss and expense occasioned by or resulting from any failure whatsoever of said Principal, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

DATED this 4th day of February, 2022

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written CONTRACT with

Wolverine Park Developers, Inc., dated May 12, 2021, for
(State or Other Entity)

Sanitary Sewer & Water Line for Wolverine Industrial Park (Phase 1), all in compliance with the plans and specifications therefore, made a part of said Contract and on file in the office of City Clerk, P.O. Box 1448, Shawnee, OK 74802-1448.

NOW, THEREFORE, if said Principal shall pay or cause to be paid to the SHAWNEE MUNICIPAL AUTHORITY/CITY OF SHAWNEE BENEFICIARY all damages, loss, and expense

which may result by reason of defective materials and/or workmanship in connection with said work, occurring within a period of **two (2) years ({one hundred (100%) percent for first year, ten (10%) for one year** thereafter, of total contract price**}** for all projects for the construction of utilities**)** from and after acceptance of said project by the SHAWNEE MUNICIPAL AUTHORITY/CITY OF SHAWNEE BENEFICIARY; and if Principal shall pay or cause to be paid all labor and materials, including the prime contractor and all subcontractors; and if principal shall save and hold SHAWNEE MUNICIPAL AUTHORITY/CITY OF SHAWNEE BENEFICIARY harmless from all damages, loss and expense occasioned by or resulting from any failure whatsoever of said Principal, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this BOND.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in his name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

(SEAL)

ATTEST:

_____

PRINCIPAL:

M & J Constructors, LLC

BY _____

TITLE Partner

(SEAL)

ATTEST:

_____

SURETY:

Granite Re, Inc.

BY _____
Attorney-in-Fact

NAME Wendy Hollen

GRANITE RE, INC.
GENERAL POWER OF ATTORNEY

Know all Men by these Presents:

That GRANITE RE, INC., a corporation organized and existing under the laws of the State of MINNESOTA and having its principal office at the City of OKLAHOMA CITY in the State of OKLAHOMA does hereby constitute and appoint:

W.M. McNEILL; LISA SHERMAN; MIKE SHANNON; CODY M. McNEILL; WENDY HOLLEN; JOHN ROGERS; KYLE D. RESER; JOHN L. BIRSNER; SUSANNE CUSIMANO its true and lawful Attorney-in-Fact(s) for the following purposes, to wit:

To sign its name as surety to, and to execute, seal and acknowledge any and all bonds, and to respectively do and perform any and all acts and things set forth in the resolution of the Board of Directors of the said GRANITE RE, INC. a certified copy of which is hereto annexed and made a part of this Power of Attorney; and the said GRANITE RE, INC. through us, its Board of Directors, hereby ratifies and confirms all and whatsoever the said:

W.M. McNEILL; LISA SHERMAN; MIKE SHANNON; CODY M. McNEILL; WENDY HOLLEN; JOHN ROGERS; KYLE D. RESER; JOHN L. BIRSNER; SUSANNE CUSIMANO may lawfully do in the premises by virtue of these presents.

In Witness Whereof, the said GRANITE RE, INC. has caused this instrument to be sealed with its corporate seal, duly attested by the signatures of its President and Assistant Secretary, this 3rd day of January, 2020.

GRANITE RE, INC. CORPORATE SEAL MINNESOTA

Kenneth D. Whittington, President

Kyle P. McDonald, Assistant Secretary

STATE OF OKLAHOMA)
) SS:
COUNTY OF OKLAHOMA)

On this 3rd day of January, 2020, before me personally came Kenneth D. Whittington, President of the GRANITE RE, INC. Company and Kyle P. McDonald, Assistant Secretary of said Company, with both of whom I am personally acquainted, who being by me severally duly sworn, said, that they, the said Kenneth D. Whittington and Kyle P. McDonald were respectively the President and the Assistant Secretary of GRANITE RE, INC., the corporation described in and which executed the foregoing Power of Attorney; that they each knew the seal of said corporation; that the seal affixed to said Power of Attorney was such corporate seal, that it was so fixed by order of the Board of Directors of said corporation, and that they signed their name thereto by like order as President and Assistant Secretary, respectively, of the Company.

BETHANY J. ALRED NOTARY PUBLIC #11003620 EXP. 04/21/23 STATE OF OKLAHOMA

My Commission Expires:
April 21, 2023
Commission #: 11003620

Notary Public

GRANITE RE, INC.
Certificate

THE UNDERSIGNED, being the duly elected and acting Assistant Secretary of Granite Re, Inc., a Minnesota Corporation, HEREBY CERTIFIES that the following resolution is a true and correct excerpt from the July 15, 1987, minutes of the meeting of the Board of Directors of Granite Re, Inc. and that said Power of Attorney has not been revoked and is now in full force and effect.

"RESOLVED, that the President, any Vice President, the Assistant Secretary, and any Assistant Vice President shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the Company in the course of its business. On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the Company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

IN WITNESS WHEREOF, the undersigned has subscribed this Certificate and affixed the corporate seal of the Corporation this 4th day of February, 2022.

GRANITE RE, INC. CORPORATE SEAL MINNESOTA

Kyle P. McDonald, Assistant Secretary

GR0800-1

Regular Board of Commissioners **4.**

Meeting Date: 04/04/2022
Proclamations
Submitted By: Kacie Eck, City Clerk
Department: City Clerk

Information

Title of Item for Agenda
Mayor's Proclamations:

"Fair Housing Month"
April 2022

"National Public Safety Telecommunications Week"
April 10th – 16th, 2022

"National Donate Life Month"
April 2022

Attachments

Fair Housing Month
National Public Safety Telecommunications Week
National Donate Life Month

City of Shawnee
OKLAHOMA

Proclamation

"Fair Housing Month"

Whereas, the Fair Housing Act, enacted on April 11, 1968, enshrined into federal law the goal of eliminating racial segregation and ending housing discrimination in the United States; and

Whereas, the Fair Housing Act prohibits discrimination in housing based on race, religion, sex, familial status, national origin, and disability, and commits recipients of federal funding to affirmatively further fair housing in their communities; and

Whereas, the City of Shawnee has adopted a Fair Housing Ordinance and has designated the Month of April as Fair Housing Month and encourages each citizen to implement the provisions of those acts; and

Whereas, the City Commission has further designated the City Clerk as the Fair Housing Activities Coordinator and requests that any person, or group of persons, inform the Fair Housing Activities Coordinator of any planned activities to promote fair housing; and

Whereas, it is the desire of the City of Shawnee to recognize those persons or groups who best create an awareness of the need for fair housing practices or otherwise promotes Fair Housing practices; and

Whereas, the City of Shawnee urges all citizens to join in recognizing fair housing and the importance it serves to our community.

Now, therefore I, Ed Bolt, Mayor of the City of Shawnee, Oklahoma by the authority vested in me, do hereby proclaim April 2022, to be

"Fair Housing Month"

EQUAL HOUSING OPPORTUNITY

In the City of Shawnee, Oklahoma
Dated this 4th day of April, 2022

_____
Ed Bolt, Mayor

_____
Lisa Lasyone, CMC, City Clerk

City of Shawnee
OKLAHOMA

Proclamation

"National Public Safety Telecommunications Week"

***Whereas*,** emergencies can occur at any time and require police, fire, or emergency medical services. When an emergency occurs, the prompt response of police officers, firefighters, and paramedics is critical to the protection of life and preservation of property; and

***Whereas*,** the safety of our police officers and firefighters is dependent upon the quality and accuracy of information obtained from citizens who telephone the City of Shawnee; and

***Whereas*,** professional Public Safety Telecommunicators are the first and most critical contact our citizens have with emergency services; and

***Whereas*,** Public Safety Telecommunicators are a vital link for our police officers and firefighters and support them by monitoring their activities by radio, providing them information, and ensuring their safety; and

***Whereas*,** over the past year, Public Safety Telecommunicators of the City of Shawnee Communications Center have contributed substantially to the apprehension of criminals, the suppression of fires, and the treatment of patients while exhibiting compassion, understanding, and professionalism during their performance; and

***Whereas*,** this proclamation is presented in honor of the men and women whose diligence and professionalism keep our City and citizens safe. Their valuable service should be applauded and held in the highest regard all through the year, for without their commitment, devotion, and hard work, a countless number of lives and property would be in jeopardy.

Now, Therefore, I, Ed Bolt, Mayor of the City of Shawnee, Oklahoma, do hereby proclaim the week of April 10 - 16, 2022, to be

"National Public Safety Telecommunications Week"

In the City of Shawnee, Oklahoma
Dated this 4th day of April, 2022

_____
Ed Bolt, Mayor

_____
Lisa Lasyone, CMC, City Clerk

City of Shawnee
OKLAHOMA

Proclamation

"National Donate Life Month"

Whereas, 106,000 Americans and 645 Oklahomans are currently on the national transplant waiting list; and

Whereas, another person is added to the waiting list every nine minutes, and on average, seventeen people die every day because the organs they need are not donated in time; and

Whereas, National Donate Life Month is a nationwide observance to raise awareness of the critical need for organ and tissue donation; and

Whereas, the most effective way to address this health crisis is to encourage citizens to register their decision to be an organ, eye, and tissue donor in the National Donate Life Registry, RegisterMe.org, LifeShareRegistry.org, or at the local Tag Agency; and

Whereas, one donor can save up to eight lives through organ donation, and can improve another 75 lives through eye and tissue donation; and

Whereas, National Donate Life Month celebrates the generosity of those who have saved lives, and encourages others to become registered donors; and

Whereas, the Mayor and City of Shawnee, Oklahoma feel that the Donate Life cause of saving and healing lives through organ, eye and tissue donation is of immediate and worthwhile importance.

Now, therefore I, Ed Bolt, Mayor of the City of Shawnee, Oklahoma by the authority vested in me, do hereby proclaim April 2022, to be

"National Donate Life Month"

In the City of Shawnee, Oklahoma
Dated this 4th day of April, 2022

_____
Ed Bolt, Mayor

_____
Lisa Lasyone, CMC, City Clerk

Regular Board of Commissioners **5.**

Meeting Date: 04/04/2022
Purchase
Submitted By: Kacie Eck, City Clerk
Department: City Clerk

Information

Title of Item for Agenda
Consideration of a loan agreement and purchase of Motorola radios for the Fire Department.

Attachments

Radio Purchase

Fire Department
16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: April 4, 2022

To: City Commission

From: Tony Wittmann, Fire Chief

Subject: Purchase of communication equipment to replace damaged and non-serviceable

Background: The Shawnee Fire Department operates a 16-staff shift which requires 16 portable radios. These radios are currently nine years old and were purchased in 2013-2014. The radios are in operation 24/7 used in extreme environments (heat and water). Currently, two radios are not operational, and one other has a broken display. Additionally, Motorola issued an "end of support notice" for the APX 6000 "AN" model on December 31st, 2019. All in-service fire department portable radios belong to this "AN" series that is no longer supported by Motorola. The requested equipment will be the newer "BN" enhanced series radios but will be compatible with the older "AN" series for seamless communications.

The request is for funds to purchase 16 portable radios and two mobile radios, which will become the front-line radios. The radios currently in operation will become reserve radios and will be utilized until no longer operable.

Financial Impact: The estimated financial impact will be $96,814.72 for the purchase. The amount of **$35,000.00** will draw from FY 21-22 capital outlay, with the remaining balance of $64,887.17 paid in FY 22-23. The final balance is based on one annual payment due 12 months after receipt of equipment. There is no penalty for early payoff, which could reduce the financial impact by approximately $3000.00.

Attachment: Current price quote from Motorola Solutions Motorola APX 6000 end of support notice, and lease agreement.

Staff Recommendation: Approval of the item.

MOTOROLA SOLUTIONS

SHAWNEE, CITY OF

Shawnee FD APX Quote 2-2022

02/10/2022

The design, technical, pricing, and other information ("Information") furnished with this submission is confidential proprietary information of Motorola Solutions, Inc. or the Motorola Solutions entity providing this quote ("Motorola") and is submitted with the restriction that it is to be used for evaluation purposes only. To the fullest extent allowed by applicable law, the Information is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the Information without the express written permission of Motorola.
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Billing Address:
SHAWNEE, CITY OF
111 S KICKAPOO
SHAWNEE, OK 74801
US

Quote Date:02/10/2022
Expiration Date:05/31/2022
Quote Created By:
Sean Miller
MR Accounts Manager
Sean.Miller@BearCom.com
4053886399

End Customer:
SHAWNEE, CITY OF
Danielle Turner
danielle.turner@shawneeok.org
405-878-1671

Contract: 36273 - SOURCEWELL
Payment Terms:30 NET

NASPO Pricing

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
	APX™ 6000 Series	APX6000 XE				
1	H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE	16	$3,595.00	$2,624.35	$41,989.60
1a	QA01427AB	ALT: IMPACT GREEN HOUSING	16	$28.00	$20.44	$327.04
1b	QA02006AA	ENH: APX6000XE RUGGED RADIO	16	$880.00	$642.40	$10,278.40
1c	Q667BB	ADD: ADP ONLY (NON-P25 CAP COMPLIANT) (US ONLY)	16	$0.00	$0.00	$0.00
1d	Q361AR	ADD: P25 9600 BAUD TRUNKING	16	$330.00	$240.90	$3,854.40
1e	H38BT	ADD: SMARTZONE OPERATION	16	$1,320.00	$963.60	$15,417.60
1f	Q806BM	ADD: ASTRO DIGITAL CAI OPERATION	16	$567.00	$413.91	$6,622.56
1g	Q58AL	ADD: 3Y ESSENTIAL SERVICE	16	$121.00	$121.00	$1,936.00

Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the ""Underlying Agreement"") that authorizes Customer to purchase equipment and/or services or license software (collectively ""Products""). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.
Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800

Line #	Item Number	Description	Qty	List Price	Sale Price	Ext. Sale Price
2	NNTN8575A	AUDIO ACCESSORY-REMOTE SPEAKER MICROPHONE,IMPRES XE RSM XT CABLE GREEN	16	$581.04	$424.16	$6,786.56
	APX™ 6500 / Enh Series	ENHANCEDAPX6500				
3	M25URS9PW1BN	APX6500 ENHANCED 7/800 MHZ MOBILE	2	$3,253.00	$2,374.69	$4,749.38
3a	G66BF	ADD: DASH MOUNT O2 APXM	2	$138.00	$100.74	$201.48
3b	GA00804AA	ADD: APX O2 CH (GREY)	2	$541.00	$394.93	$789.86
3c	G444AH	ADD: APX CONTROL HEAD SOFTWARE	2	$0.00	$0.00	$0.00
3d	G51AU	ENH: SMARTZONE OPERATION APX6500	2	$1,320.00	$963.60	$1,927.20
3e	G806BL	ENH: ASTRO DIGITAL CAI OP APX	2	$567.00	$413.91	$827.82
3f	G361AH	ENH: P25 TRUNKING SOFTWARE APX	2	$330.00	$240.90	$481.80
3g	G193AK	ADD: ADP ONLY (NON-P25 CAP COMPLIANT) (US ONLY)	2	$0.00	$0.00	$0.00
3h	GA01606AA	ADD: NO GPS/WI-FI ANTENNA NEEDED	2	$0.00	$0.00	$0.00
3i	W484AF	ALT: ANT 3DB GAIN 762-870MHZ	2	$42.00	$30.66	$61.32
3j	W22BA	ADD: STD PALM MICROPHONE APX	2	$79.00	$57.67	$115.34
3k	G831AD	ADD: SPKR 15W WATER RESISTANT	2	$66.00	$48.18	$96.36
3l	G78AT	ENH: 3 YEAR ESSENTIAL SVC	2	$176.00	$176.00	$352.00

Grand Total $96,814.72(USD)

Notes:

Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the ""Underlying Agreement"") that authorizes Customer to purchase equipment and/or services or license software (collectively ""Products""). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.

Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800

- Unless otherwise noted, this quote excludes sales tax or other applicable taxes (such as Goods and Services Tax, sales tax, Value Added Tax and other taxes of a similar nature). Any tax the customer is subject to will be added to invoices.

Any sales transaction following Motorola's quote is based on and subject to the terms and conditions of the valid and executed written contract between Customer and Motorola (the ""Underlying Agreement"") that authorizes Customer to purchase equipment and/or services or license software (collectively ""Products""). If no Underlying Agreement exists between Motorola and Customer, then Motorola's Standard Terms of Use and Motorola's Standard Terms and Conditions of Sales and Supply shall govern the purchase of the Products.

Motorola Solutions, Inc.: 500 West Monroe, United States - 60661 ~ #: 36-1115800

MOTOROLA SOLUTIONS

Purchase Order Checklist

Marked as PO/ Contract/ Notice to Proceed on Company Letterhead **(PO will not be processed without this)**
PO Number/ Contract Number
PO Date
Vendor = Motorola Solutions, Inc.
Payment (Billing) Terms/ State Contract Number
Bill-To Name on PO must be equal to the *Legal* Bill-To Name
Bill-To Address
Ship-To Address (If we are shipping to a MR location, it must be documented on PO)
Ultimate Address (If the Ship-To address is the MR location then the Ultimate Destination address must be documented on PO)
PO Amount must be equal to or greater than Order Total
Non-Editable Format (Word/ Excel templates cannot be accepted)
Bill To Contact Name & Phone # and EMAIL for customer accounts payable dept
Ship To Contact Name & Phone #
Tax Exemption Status
Signatures (As required)

Finance Quote

From: Kirk Grannes – Program Manager
Date: 3/11/2022
Re: Finance Quote for City of Shawnee, OK

Thank you for the opportunity to propose the following equipment financing solution. **This is only a quote and does not represent a commitment by U.S. Bank Equipment Finance (USBEF).**

Equipment Description:	Motorola quote 1668053
Cost:	$96,814.72 less $35,000 down payment
Term:	1 annual payment due in 12 months after equipment delivery.
EOL:	Tax Exempt Lease Purchase (Bank Qualified)
Payment Amount:	$64,887.17
Interest rate:	4.86%
Expiration Date:	30 days

Assumptions:

- Above payments do not include any applicable taxes
- Rates are subject to USBEF's final equipment collateral & configuration, credit, legal and documentation approval
- Customer should consult their tax advisor to find out the tax benefits specific to their organization
- This offer is subject to the execution of all required documentation and in form and substance acceptable to USBEF

Thank you again for the opportunity to provide you with this finance quote. Please feel free to contact me at 507-532-1695 with any questions or comments and I look forward to working with you on this, and any future, finance quotes.

Sincerely,

Kirk Grannes
Program Manager
U.S. Bank Equipment Finance
P: 507-532-1695
kirk.grannes@usbank.com

EQUIPMENT FINANCE

Document Checklist

- ☐ **Tax-Exempt Lease/Purchase Agreement** – Execute signature block at the top of the first page of the Agreement.

- ☐ **Addendum to Tax-Exempt Lease/Purchase Agreement** – If required by Lessor, this document must be executed in the presence of an attester. The attesting witness does not have to be a notary but must be present at the time of execution. The attester will execute the signature block below the Lessee's signature block at the bottom right of the page. If computation is required, please submit a copy of the computation test with the addendum.

- ☐ **Property Schedule** – 1) If the transaction can be designated as a "bank qualified" transaction – one where Lessee reasonably anticipates not issuing more than $10 million in tax-exempt obligations in a calendar year – **then you should initial the line under this section;** and 2) execute the signature block at the bottom of the page. This document must be executed in the presence of an attester. The attesting witness does not have to be a notary but must be present at the time of execution.

- ☐ **Property Description** – **Exhibit A** – Execute signature block at the bottom of the page.

- ☐ **Amortization and Lease Payment Schedule** – **Exhibit B** – Execute signature block at the bottom of the page.

- ☐ **Certificate of Acceptance** – **Exhibit C** – 1) if billing address is different than address shown on the Agreement, fill in billing information under # 2; 2) the date that all equipment is delivered, installed and accepted is the date that should be placed on the "ACCEPTANCE DATE" line; and 3) execute signature block at the bottom of the page.

- ☐ **Lessee's General and Incumbency Certificate** – **Exhibit D** – The General Certificate must be signed by the person signing the Agreement. The Incumbency Certificate must be signed by an officer other than the person signing the Agreement.

- ☐ **Lessee's Counsel's Opinion** – **Exhibit E** – If required by Lessor, this document will need to be executed by your attorney, dated, and placed on his/her letterhead.

- ☐ **Insurance Authorization and Verification** – To be filled out by Lessee and returned with the executed documents.

- ☐ **Notification of Tax Treatment** – Please provide your State Sales/Use tax Exemption Certificate, if applicable.

- ☐ **Form 8038-GC or G** – Blank form provided to Lessee. Please consult your local legal/bond counsel or tax consultant with questions.

- ☐ **Original Documents** – Lessor will require original documents, including original 8038 form, prior to funding.

- ☐ **Validation of Board Approval** – If required by Lessor, a copy of board minutes or board resolution should be provided showing approval of the contract.

- ☐ **Services and Supplies Rider** – If Lessee has requested that Lessor, as a convenience to Lessee, invoice Lessee for certain service and supply payments Lessee owes to Vendor, this document must be executed by Lessee in the presence of an attester. The attesting witness does not have to be a notary but must be present at the time of execution.

usbank
EQUIPMENT FINANCE

Tax-Exempt Lease/Purchase Agreement

APPLICATION NO.
2878905

ACCEPTED BY LESSOR:		
FULL LEGAL NAME **U.S. Bank Equipment Finance, a division of U.S. Bank National Association ("U.S. Bank Equipment Finance")**		
STREET ADDRESS 1310 Madrid Street, Suite 101		
CITY Marshall	STATE MN	ZIP 56258
SIGNATURE		DATE
PRINT NAME		
TITLE	TELEPHONE NUMBER 800-328-5371	

AGREED TO BY LESSEE:		
FULL LEGAL NAME CITY OF SHAWNEE		
STREET ADDRESS 16 W 9th		
CITY SHAWNEE	STATE OK	ZIP 74801
SIGNATURE		DATE
PRINT NAME		
TITLE	TELEPHONE NUMBER 405-878-1556	

AGREEMENT: Lessor hereby leases to Lessee and Lessee hereby leases from Lessor all the Property described in Property Schedule incorporated herein by reference, upon the terms and conditions set forth herein and as supplemented by the terms and conditions set forth in the Property Schedule. This Tax-Exempt Lease/Purchase Agreement together with the Property Schedule shall be defined as the "Agreement."

LEASE TERM: The Lease Term of the Property listed in the Property Schedule (the "Lease Term") shall commence upon the commencement date of the Property Schedule (the "Commencement Date"). The Lease Term shall consist of an original term (the "Original Term"), commencing on such Commencement Date and continuing through the end of Lessee's then-current fiscal year, and a series of successive renewal terms (each, a "Renewal Term"), each contemporaneous with Lessee's budget year, with the final Renewal Term ending as provided in the Property Schedule. This Agreement cannot be canceled or terminated by Lessee except as expressly provided herein. This Agreement is a triple net lease.

LEASE PAYMENTS: Lessee shall pay rent to Lessor for the Property in the amounts, and on the dates specified, in the Property Schedule. Lessor and Lessee intend that the obligation of Lessee to pay Lease Payments hereunder shall not in any way be construed to be a debt of Lessee in contravention of any applicable constitutional or statutory limitations or requirements concerning the creation of indebtedness by Lessee, nor shall anything contained herein constitute a pledge of the general tax revenues, funds or monies of Lessee.

NO OFFSET: SUBJECT TO THE RIGHT TO NON-APPROPRIATE, SET FORTH BELOW, THE OBLIGATIONS OF LESSEE TO PAY THE LEASE PAYMENTS DUE UNDER THE PROPERTY SCHEDULE AND TO PERFORM AND OBSERVE THE OTHER COVENANTS AND AGREEMENTS CONTAINED IN THIS AGREEMENT SHALL BE ABSOLUTE AND UNCONDITIONAL IN ALL EVENTS WITHOUT ABATEMENT, DIMINUTION, DEDUCTION, SET-OFF OR DEFENSE, FOR ANY REASON, INCLUDING WITHOUT LIMITATION, ANY DEFECTS, MALFUNCTIONS, BREAKDOWNS OR INFIRMITIES IN THE PROPERTY OR ANY ACCIDENT, CONDEMNATION OR UNFORESEEN CIRCUMSTANCES. THIS PROVISION SHALL NOT LIMIT LESSEE'S RIGHTS OR ACTIONS AGAINST ANY VENDOR. Lessee shall pay when due all taxes, fees and governmental charges assessed or levied against or with respect to the Property.

LATE CHARGES: Lessee shall pay a late charge of five cents per dollar or the highest amount permitted by applicable law, whichever is lower, on all delinquent Lease Payments and interest on said delinquent amounts from the date such amounts were due until paid at the rate of 12% per annum or the maximum amount permitted by law, whichever is less.

MAINTENANCE OF PROPERTY: At all times during the Lease Term, Lessee shall, at Lessee's own cost and expense, maintain, preserve, and keep the Property in good working order, and condition, and from time to time make or cause to be made all necessary and proper repairs, replacements, and renewals to the Property, which shall become part of the Property. The Property is and will remain personal property.

INSURANCE OF PROPERTY: All risk of loss to the Property shall be borne by the Lessee. At all times during the Lease Term, Lessee shall, at Lessee's own cost and expense, cause casualty, public liability, and property damage insurance to be carried and maintained (or shall provide Lessor with a certificate stating that adequate self-insurance has been provided) with respect to the Property, sufficient to protect the full replacement value of the Property and to protect from liability in all events for which insurance is customarily available. Lessee shall furnish to Lessor certificates evidencing such coverage throughout the Lease Term. Any insurance policy to be carried and maintained pursuant to this Agreement shall be so written or endorsed as to make losses, if any, payable to Lessee and Lessor as their respective interests may appear. All such liability insurance shall name Lessor as an additional insured. Each insurance policy carried and maintained pursuant to this Agreement shall contain a provision to the effect that the insurance company shall not cancel the policy or modify it materially or adversely to the interest of the Lessor without first giving written notice thereof to Lessor at least 30 days in advance of such change of status.

QUIET ENJOYMENT AND TERMINATION OF LESSOR'S INTEREST: To secure Lessee's obligations hereunder, Lessor is granted a security interest in the Property, including substitutions, repairs, replacements and renewals, and the proceeds thereof, which is a first lien thereon. Lessee hereby authorizes Lessor to file all financing statements which Lessor deems necessary or appropriate to establish, maintain and perfect such security interest. Provided there does not exist an Event of Default or Nonappropriation Event, as defined herein, the Lessee shall have the right of quiet enjoyment of the Property throughout the Lease Term. If Lessee shall have performed all of its obligations and no default shall have occurred and be continuing under this Agreement, and this Agreement shall not have been earlier terminated with respect to the Property, then, at the end of the Lease Term with respect to any item of Property, Lessor's interest in such Property shall terminate. Unless otherwise required by law, title to the Property shall be in the name of Lessee, subject to Lessor's interest hereunder.

TAX EXEMPTION: The parties contemplate that interest payable under this Agreement will be excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"). The tax-exempt status of this Agreement provides the inducement for the Lessor to offer financing at the interest rate set forth herein. Therefore, should this Agreement be deemed by any taxing authority not to be exempt from taxation, Lessee agrees that the interest rate shall be adjusted, as of the date of loss of tax exemption, to an interest rate calculated to provide Lessor or its assignee an after tax yield equivalent to the tax exempt rate and Lessor shall notify Lessee of the taxable rate. Provided, however, that the provision of the preceding sentence shall apply only upon a final determination that the interest payments are not excludable from gross income under Section 103(a) of the Code, and shall not apply if the determination is based upon the individual tax circumstances of the Lessor, or a finding that the party seeking to exclude such payments from gross income is not the owner and holder of the obligation under the Code.

REPRESENTATIONS AND WARRANTIES OF LESSEE: Lessee hereby represents and warrants to Lessor that: (a) Lessee is a State, possession of the United States, the District of Columbia, or political subdivision thereof as defined in Section 103 of the Code and Treasury Regulations and Rulings related thereto, and if Lessee is incorporated, it is duly organized and existing under the Constitution and laws of its jurisdiction of incorporation and will do or cause to be done all things necessary to preserve and keep such organization and existence in full force and effect; (b) Lessee has been duly authorized by the Constitution and laws of the applicable jurisdiction and by a resolution of its governing body (which resolution, if requested by Lessor, is attached hereto), to execute and deliver this Agreement and to carry out its obligations hereunder; (c) all legal requirements have been met, and procedures have been followed, including public bidding, in order to ensure the enforceability of this Agreement; (d) the Property will be used by Lessee only for essential governmental or proprietary functions of Lessee consistent with the scope of Lessee's authority and will not be used in a trade or business of any person or entity, by the federal government or for any personal, family or household use.

Lessee's need for the Property is not expected to diminish during the term of the Agreement; (e) Lessee has funds available to pay Lease Payments until the end of its current appropriation period, and it intends to request funds to make Lease Payments in each appropriation period, from now until the end of the term of this Agreement; (f) Lessee shall comply at all times with all applicable requirements of the Code, including but not limited to the registration and reporting requirements of Section 149, to maintain the federal tax-exempt status of the Agreement, and Lessee shall maintain a system with respect to this Agreement, which tracks the name, and ownership interest of each assignee who has both the responsibility for administration of, and ownership interest in this Agreement; (g) Lessee's exact legal name is as set forth on the first page of this Agreement. Lessee will not change its legal name in any respect without giving thirty (30) days prior written notice to Lessor.

RISK OF LOSS COVENANTS: Lessee shall not be required to indemnify or hold Lessor harmless against liabilities arising from the Agreement. However, as between Lessor and Lessee, and to the extent permitted by law, Lessee shall bear the risk of loss for, shall pay directly, and shall defend against any and all claims, liabilities, proceedings, actions, expenses, damages or losses arising under or related to the Property, including, but not limited to, the possession, ownership, lease, use or operation thereof, except that Lessee shall not bear the risk of loss of, nor pay for, any claims, liabilities, proceedings, actions, expenses, damages or losses that arise directly from events occurring after Lessee has surrendered possession of the Property in accordance with the terms of the Agreement to Lessor or that arise directly from the gross negligence or willful misconduct of the Lessor.

NON-APPROPRIATION: If sufficient funds are not appropriated to make Lease Payments under this Agreement (such failure to appropriate, a "Nonappropriation Event"), this Agreement shall terminate and Lessee shall not be obligated to make Lease Payments under this Agreement beyond the then current fiscal year for which funds have been appropriated. Upon such a Nonappropriation Event, Lessee shall, no later than the end of the fiscal year for which Lease Payments have been appropriated, deliver possession of the Property to Lessor. If Lessee fails to deliver possession of the Property to Lessor, the termination shall nevertheless be effective but Lessee shall be responsible for the payment of damages in an amount equal to the portion of Lease Payments thereafter coming due that is attributable to the number of days after the termination during which the Lessee fails to deliver possession and for any other loss suffered by Lessor as a result of Lessee's failure to deliver possession as required. Lessee shall notify Lessor in writing within seven (7) days after the failure of the Lessee to appropriate funds sufficient for the payment of the Lease Payments, but failure to provide such notice shall not operate to extend the Lease Term or result in any liability to Lessee. A Nonappropriation Event shall not constitute an Event of Default hereunder.

ASSIGNMENT BY LESSEE: Without Lessor's prior written consent, Lessee may not, by operation of law or otherwise, assign, transfer, pledge, hypothecate or otherwise dispose of the Property, this Agreement or any interest therein.

ASSIGNMENT BY LESSOR: Lessor may assign, sell or encumber all or any part of this Agreement, the Lease Payments and any other rights or interests of Lessor hereunder without the necessity of providing notice to or obtaining the consent of Lessee; provided that Lessee shall have no obligation to make payments to any assignee unless and until Lessee has received notice of the name, address and tax identification number of the assignee. The initial Lessor or its assignee(s) shall maintain a register of all assignees of this Agreement. To the extent permitted by applicable law, such assignees may include trust agents for the benefit of holders of certificates of participation. Lessee agrees that if Lessor sells, assigns or transfers this Agreement, Lessor's assignee will have the same rights and benefits that Lessor has now and will not have to perform any of Lessor's obligations. **Lessee agrees that Lessor's assignee will not be subject to any claims, defenses, or offsets that Lessee may have against Lessor.**

EVENTS OF DEFAULT: Lessee shall be in default under this Agreement upon the occurrence of any of the following events or conditions ("Events of Default"), unless such Event of Default shall have been specifically waived by Lessor in writing: (a) default by Lessee in payment of any Lease Payment or any other indebtedness or obligation now or hereafter owed by Lessee to Lessor under this Agreement or in the performance of any obligation, covenant or liability contained in this Agreement and the continuance of such default for ten (10) consecutive days after written notice thereof by Lessor to Lessee, or (b) any warranty, representation or statement made or furnished to Lessor by or on behalf of Lessee proves to have been false in any material respect when made or furnished, or (c) actual or attempted sale, lease or encumbrance of any of the Property, or the making of any levy, seizure or attachment thereof or thereon, or (d) dissolution, termination of existence, discontinuance of the Lessee, insolvency, business failure, failure to pay debts as they mature, or appointment of a receiver of any part of the property of, or assignment for the benefit of creditors by the Lessee, or the commencement of any proceedings under any bankruptcy, reorganization or arrangement laws by or against the Lessee.

REMEDIES OF LESSOR: Upon the occurrence of any Event of Default and at any time thereafter, Lessor may, without any further notice, exercise one or more of the following remedies as Lessor in its sole discretion shall elect: (a) terminate the Agreement and all of Lessee's rights hereunder as to any or all items of Property; (b) require Lessee, at Lessee's expense, to return any or all items of Property wherever found to Lessor at such place within the United States as Lessor may designate, and for this purpose Lessor may enter upon Lessee's premises where any item of Property is located and remove such item of Property free from all claims of any nature whatsoever by Lessee and Lessor may thereafter dispose of the Property; provided, however, that any proceeds from the disposition of the Property in excess of the sum required to (i) pay to Lessor an amount equal to the total unpaid principal component of Lease Payments under the Property Schedule, including principal component not otherwise due until future fiscal years, (ii) pay any other amounts then due under the Property Schedule and this Agreement, and (iii) pay Lessor's costs and expenses associated with the disposition of the Property and the Event of Default (including attorney's fees), shall be paid to Lessee or such other creditor of Lessee as may be entitled thereto, and further provided that no deficiency shall be allowed against Lessee, except with respect to Lessor's costs and expenses associated with disposition of the Property; (c) proceed by appropriate court action or actions to enforce performance by Lessee of its obligations hereunder or to recover damages for the breach hereof or pursue any other remedy available to Lessor at law or in equity or otherwise; (d) declare all unpaid Lease Payments and other sums payable hereunder during the current fiscal year of the Lease Term to be immediately due and payable without any presentment, demand or protest and / or take any and all actions to which Lessor shall be entitled under applicable law. No right or remedy herein conferred upon or reserved to Lessor is exclusive of any right or remedy herein or at law or in equity or otherwise provided or permitted, but each shall be cumulative of every other right or remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise, and may be enforced concurrently therewith or from time to time. Lessee and Lessor hereby irrevocably waive all right to trial by jury in any action, proceeding or counterclaim (whether based on contract, tort or otherwise) arising out of or relating to this Agreement.

COSTS AND ATTORNEY FEES: Upon the occurrence of an Event of Default by Lessee in the performance of any term of this Agreement, Lessee agrees to pay to Lessor or reimburse Lessor for, in addition to all other amounts due hereunder, all of Lessor's costs of collection, including reasonable attorney fees, whether or not suit or action is filed thereon. Any such costs shall be immediately due and payable upon written notice and demand given to Lessee, shall be secured by this Agreement until paid and shall bear interest at the rate of 12% per annum or the maximum amount permitted by law, whichever is less. In the event suit or action is instituted to enforce any of the terms of this Agreement, the prevailing party shall be entitled to recover from the other party such sum as the court may adjudge reasonable as attorneys' fees at trial or on appeal of such suit or action or in any bankruptcy proceeding, in addition to all other sums provided by law.

NOTICES: All notices, and other communications provided for herein shall be deemed given when delivered or mailed by certified mail, postage prepaid, addressed to Lessor or Lessee at their respective addresses set forth herein or such other addresses as either of the parties hereto may designate in writing to the other from time to time for such purpose.

AMENDMENTS: This Agreement may not be amended except in writing signed by both parties.

CONSTRUCTION: This Agreement shall be governed by and construed in accordance with the laws of the Lessee's State. Titles of sections of this Agreement are for convenience only and shall not define or limit the terms or provisions hereof. Time is of the essence under this Agreement. This Agreement shall inure to the benefit of and shall be binding upon Lessor and Lessee and their respective successors and assigns. This Agreement may be simultaneously executed in counterparts, each shall be an original with all being the same instrument.

EQUIPMENT FINANCE

APPLICATION NO.
2878905

Property Schedule to Tax-Exempt Lease/Purchase Agreement

This **Property Schedule** is entered into pursuant to the Tax-Exempt Lease/Purchase Agreement between Lessor and Lessee.

1. Entire Agreement; Interpretation: The terms and conditions of the Tax-Exempt Lease/Purchase Agreement (the "Agreement") are incorporated herein. The Agreement, this Property Schedule and the associated documents hereto constitute the entire agreement between Lessor and Lessee with respect to the Property and supersede any purchase order, invoice, request for proposal, response or other related document.
2. Commencement Date: The Commencement Date of this Property Schedule is the date that Lessor pays Vendor for the Property.
3. Property Description: The Property subject to this Property Schedule is described in Exhibit A, attached hereto. It includes all replacements, parts, repairs, additions, accessions and accessories incorporated therein or affixed or attached thereto and any and all proceeds of the foregoing, including, without limitation, insurance recoveries.
4. Term and Payments: Lease Term and Lease Payments are per the attached Exhibit B Amortization and Lease Payment Schedule. If the parties enter into an escrow agreement for the acquisition of the Property, then the escrow agreement shall be attached hereto as Exhibit F. In lieu of the Acceptance Date for commencement of Lease Payments, the date of deposit of the Property Cost into the escrow by Lessor shall be used. Lessee shall have the option to prepay the Lease Payments due under this Property Schedule by paying the Termination Amount shown in the attached Amortization and Lease Payment Schedule, plus any other amounts due and owing at the time of prepayment, subject to per diem adjustment.
5. Certificate of Acceptance: Attached as Exhibit C, hereto.
6. Expiration: Lessor, at its sole determination, may choose not to accept this Property Schedule if the fully executed, original Agreement (including this Property Schedule and all ancillary documents) are not received by Lessor at its place of business by 6/9/2022.
7. Property Cost: The total principal amount under this Property Schedule for the acquisition cost of the Property is $96,814.72.
8. Lessee's General and Incumbency Certificate: Lessee has provided the Lessee's General and Incumbency Certificate in the form attached as Exhibit D, hereto.
9. Lessee's Counsel's Opinion: If required by Lessor, Lessee has provided the opinion of its legal counsel substantially in the form as attached as Exhibit E, hereto.
10. Private Activity Issue: Lessee understands that among other things, in order to maintain the exclusion of the interest component of Lease Payments from gross income for federal income tax purposes, it must limit and restrict the rights private businesses (including, for this purpose, the federal government and its agencies and organizations described in the Code § 501(c)(3)) have to use the Property. Each of these requirements will be applied beginning on the later of the Commencement Date or date each portion of the Property is placed in service and will continue to apply until earlier of the end of the economic useful life of the Property or the date the Agreement or any tax-exempt obligation issued to refund the Property Schedule is retired (the "Measurement Period").

    Lessee will comply with the requirements of Section 141 of the Code and the regulations thereunder which provide restrictions on special legal rights that users other than Lessee or a state or local government or an agency or instrumentality of a state or a local government (an "Eligible User") may have to use the Property. For this purpose, special legal rights may arise from a management or service agreement, lease, research agreement or other arrangement providing any entity except an Eligible User the right to use the Property. Any use of the Property by a user other than an Eligible User is referred to herein as "Non-Qualified Use".

    Throughout the Measurement Period, all of the Property is expected to be owned by Lessee. Throughout the Measurement Period, Lessee will not permit the Non-Qualified Use of the Property to exceed 10%.
11. Bank Qualification: Lessee designates this Agreement and Property Schedule as a "qualified tax-exempt obligation" as defined in Section 265(b)(3)(B) of the Internal Revenue Code of 1986, as amended. Lessee reasonably anticipates issuing tax-exempt obligations (excluding private activity bonds other than qualified 501(c)(3) bonds and including all tax-exempt obligations of subordinate entities of the Lessee) during the calendar year this Agreement and Property Schedule was funded, in an amount not exceeding $10,000,000.

_____ Lessee initial here, if Bank Qualification is applicable.

IN WITNESS WHEREOF, Lessor and Lessee have caused this Property Schedule to be executed in their names by their duly authorized representatives.

U.S. Bank Equipment Finance		**CITY OF SHAWNEE**	
Lessor		Lessee	
Signature	Date	Signature	Date
Print Name	Title	Print Name	Title
		Attest By Signature	
		Print Name	Title

usbank
EQUIPMENT FINANCE

Exhibit A

APPLICATION NO.
2878905

Property Description

VENDOR			
MOTOROLA SOLUTIONS INC			
STREET ADDRESS	CITY	STATE	ZIP
500 WEST MONROE 44TH FL	CHICAGO	IL	60661

PROPERTY DESCRIPTION

QUANTITY	DESCRIPTION	SERIAL NUMBER	PROPERTY LOCATION
16	APX6000 700/800 MODEL 2.5 PORTABLE		111 S KICKAPOO, SHAWNEE, OK 74801
16	AUDIO ACCESSORY-REMOTE SPEAKER MICROPHONE,IMPRES XE RSM XT CABLE GREEN		111 S KICKAPOO, SHAWNEE, OK 74801
2	APX6500 ENHANCED 7/800 MHZ MOBILE		111 S KICKAPOO, SHAWNEE, OK 74801

LESSEE ACCEPTANCE

CITY OF SHAWNEE

NAME OF LESSEE | SIGNATURE | TITLE | DATED

EQUIPMENT FINANCE

APPLICATION NO.
2878905

Term: 2 ANNUAL

Payment Structure: ANNUAL

Interest Rate: 4.86%

If the Lease Payment Dates are not defined in this Amortization and Lease Payment Schedule, the first Lease Payment shall be due on the Commencement Date and each subsequent Lease Payment shall be due annually thereafter.

Payment No.	Lease Payment	Interest Portion	Principal Portion	Outstanding Balance	Termination Amount (After Making Said Payment)
Beginning Balance				96,814.72	
1	35,000.00	0	35,000.00	61,814.72	61,814.72
2	64,887.17	3,072.45	61,814.72		
	99,887.17	3,072.45	96,814.72		

This Amortization and Lease Payment Schedule is hereby verified as correct by the undersigned, who acknowledges receipt of a copy.

LESSEE ACCEPTANCE

CITY OF SHAWNEE

NAME OF LESSEE | SIGNATURE | TITLE | DATED

usbank
EQUIPMENT FINANCE

Exhibit C

APPLICATION NO.
2878905

Certificate of Acceptance

This **Certificate of Acceptance** is pursuant to Tax-Exempt Lease/Purchase Agreement dated as of _____ and the related Property Schedule, between Lessor and Lessee (the "Agreement").

1. Property Acceptance. Lessee hereby certifies and represents to Lessor that the Property referenced in the Agreement has been acquired, made, delivered, installed and accepted as of the date indicated below. Lessee has conducted such inspection and/or testing of the Property as it deems necessary and appropriate and hereby acknowledges that it accepts the Property for all purposes. Lessee will immediately begin making Lease Payments in accordance with the times and amounts specified herein. LESSOR MAKES NO (AND SHALL NOT BE DEEMED TO HAVE MADE ANY) WARRANTIES, EXPRESS OR IMPLIED, AS TO ANY MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, THE DESIGN, OPERATION OR CONDITION OF, OR THE QUALITY OF THE MATERIAL, EQUIPMENT OR WORKMANSHIP IN, THE PROPERTY, ITS MERCHANTABILITY OR ITS FITNESS FOR ANY PARTICULAR PURPOSE, THE STATE OF TITLE THERETO OR ANY COMPONENT THEREOF, THE ABSENCE OF LATENT OR OTHER DEFECTS (WHETHER OR NOT DISCOVERABLE), AND LESSOR HEREBY DISCLAIMS THE SAME; IT BEING UNDERSTOOD THAT THE PROPERTY IS LEASED TO LESSEE "AS IS" ON THE DATE OF THIS AGREEMENT OR THE DATE OF DELIVERY, WHICHEVER IS LATER, AND ALL SUCH RISKS, IF ANY, ARE TO BE BORNE BY LESSEE.

2. Billing Address. If billing address differs from the address listed on the Tax-Exempt Lease/Purchase Agreement please list below:

BILLING NAME			
STREET ADDRESS	CITY	STATE	ZIP

IN WITNESS WHEREOF, Lessee has caused this Certificate of Acceptance to be executed by their duly authorized representative.

Acceptance Date

CITY OF SHAWNEE
Lessee

Signature

Print Name Title

usbank
EQUIPMENT FINANCE

Exhibit D

APPLICATION NO.
2878905

Lessee's General and Incumbency Certificate

GENERAL CERTIFICATE

Re: Tax-Exempt Lease/Purchase Agreement and Property Schedule dated as of _____, between CITY OF SHAWNEE, as Lessee ("Lessee") and U.S. Bank Equipment Finance, a division of U.S. Bank National Association as Lessor.

The undersigned, being the duly elected, qualified and acting official of Lessee holding the title stated in the signature line below, does hereby certify as of the date of this Certificate and the date of the Agreement (as defined below), as follows:

1. If required by applicable law, Lessee did, at a meeting of the governing body of the Lessee, by resolution or ordinance duly enacted, in accordance with all requirements of law, approve and authorize the execution and delivery of the above-referenced Property Schedule (the "Property Schedule") and the Tax-Exempt Lease/Purchase Agreement (the "Agreement") by the undersigned.
2. If the aforementioned meeting(s) was required by applicable law, the meeting(s) of the governing body of the Lessee at which the Agreement and the Property Schedule were approved and authorized to be executed was duly called, regularly convened and attended throughout by the requisite quorum of the members thereof, and the enactment approving the Agreement and the Property Schedule and authorizing the execution thereof has not been altered or rescinded. All meetings required by applicable law of the governing body of Lessee relating to the authorization and delivery of Agreement and the Property Schedule have been: (a) held within the geographic boundaries of the Lessee; (b) open to the public, allowing all people to attend; (c) conducted in accordance with internal procedures of the governing body; and (d) conducted in accordance with the charter of the Lessee, if any, and the laws of the State.
3. No event or condition that constitutes, or with the giving of notice or the lapse of time or both would constitute, an Event of Default or a Nonappropriation Event (as such terms are defined in the Agreement) exists at the date hereof with respect to this Property Schedule under the Agreement.
4. The acquisition of all of the Property under the Agreement and the Property Schedule has been duly authorized by the governing body of Lessee.
5. Lessee has, in accordance with the requirements of law, fully budgeted and appropriated sufficient funds for the current budget year to make the Lease Payments scheduled to come due during the current budget year under the Agreement and the Property Schedule and to meet its other obligations for the current budget year and such funds have not been expended for other purposes.
6. As of the date hereof, no litigation is pending, (or, to my knowledge, threatened) against Lessee in any court (a) seeking to restrain or enjoin the delivery of the Agreement or the Property Schedule or of other agreements similar to the Agreement; (b) questioning the authority of Lessee to execute the Agreement or the Property Schedule, or the validity of the Agreement or the Property Schedule, or the payment of principal of or interest on, the Property Schedule; (c) questioning the constitutionality of any statute, or the validity of any proceedings, authorizing the execution of the Agreement and the Property Schedule; or (d) affecting the provisions made for the payment of or security for the Agreement and the Property Schedule.

IN WITNESS WHEREOF, the undersigned has signed this Certificate on the date stated below.

CITY OF SHAWNEE

Lessee

X

Signature of Person to Sign Agreement

Print Title of Person to Sign Agreement

Print Name of Person to Sign Agreement

Print Date that Above Person Signed this Certificate

INCUMBENCY CERTIFICATE

Re: Tax-Exempt Lease/Purchase Agreement and Property Schedule dated as of _____, between CITY OF SHAWNEE, as Lessee ("Lessee") and U.S. Bank Equipment Finance, a division of U.S. Bank National Association as Lessor ("Agreement").

The undersigned, being the duly elected, qualified and acting Secretary, Clerk, or other duly authorized official or signatory of the Lessee does hereby certify, as of the date of this Certificate and the date of the Agreement (as defined in the General Certificate above), as follows:

As of the date of the meeting(s) of the governing body of the Lessee at which the above-referenced Agreement and the Property Schedule were approved and authorized to be executed, and as of the date hereof, the below-named representative of the Lessee held and holds the office set forth below, and the signature set forth below is his/her true and correct signature.

NAME OF PERSON SIGNING AGREEMENT	TITLE OF PERSON SIGNING AGREEMENT	SIGNATURE OF PERSON SIGNING AGREEMENT

IN WITNESS WHEREOF, the undersigned has signed this Certificate on the date stated below.

X

Signature of Secretary, Clerk or other duly authorized official or signatory of Lessee (Cannot be same as Person Signing Agreement)

Print Title of Person who signed this Certificate

Print Name of Person Signing this Certificate

Print Date that Above Person Signed this Certificate

EQUIPMENT FINANCE

Exhibit E

Lessee's Counsel's Opinion

[To be provided on letterhead of Lessee's counsel.]

U.S. Bank Equipment Finance
1310 Madrid Street, Ste. 101
Marshall, MN 56258

CITY OF SHAWNEE
16 W 9th
SHAWNEE, OK 74801

RE: Agreement between U.S. Bank Equipment Finance and CITY OF SHAWNEE.

Ladies and Gentlemen:

We have acted as special counsel to CITY OF SHAWNEE ("Lessee") in connection with the Tax-Exempt Lease/Purchase Agreement and Property Schedule dated as of _____, between CITY OF SHAWNEE, as Lessee and U.S. Bank Equipment Finance, a division of U.S. Bank National Association ("U.S. Bank Equipment Finance"), as Lessor, and any amendment or addendum thereto, if any (together, the "Agreement"). We have examined the law and such certified proceedings and other papers as we deem necessary to render this opinion.

Based upon the foregoing, we are of the opinion that, under existing law:

1. Lessee is a public body corporate and politic, duly organized and existing under the laws of the State, and has a substantial amount of one or more of the following sovereign powers: (a) the power to tax, (b) the power of eminent domain, and (c) the police power.

2. Lessee has all requisite power and authority to enter into the Agreement and to perform its obligations thereunder.

3. All proceedings of Lessee and its governing body relating to the authorization and approval of the Agreement, the execution thereof and the transactions contemplated thereby have been conducted in accordance with all applicable open meeting laws and all other applicable state and federal laws.

4. The Agreement has been duly executed and delivered by Lessee and constitute legal, valid and binding obligations of Lessee, enforceable against Lessee in accordance with the terms thereof, except insofar as the enforcement thereof may be limited by any applicable bankruptcy, insolvency, moratorium, reorganization or other laws of equitable principles of general application, or of application to municipalities or political subdivisions such as the Lessee, affecting remedies or creditors' rights generally, and to the exercise of judicial discretion in appropriate cases.

5. As of the date hereof, based on such inquiry and investigation as we have deemed sufficient, no litigation is pending, (or, to our knowledge, threatened) against Lessee in any court (a) seeking to restrain or enjoin the delivery of the Agreement; (b) questioning the authority of Lessee to execute the Agreement, or the validity of the Agreement, or the payment of principal of or interest on, the Property Schedule; (c) questioning the constitutionality of any statute, or the validity of any proceedings, authorizing the execution of the Agreement; or (d) affecting the provisions made for the payment of or security for the Agreement.

This opinion may be relied upon by Lessor, its successors and assigns, and any other legal counsel who provides an opinion with respect to the Agreement and the Property Schedule.

Very truly yours,

By: _____

Name: _____

Title: _____

Dated: _____

EQUIPMENT FINANCE

Tax-Exempt Lease/Purchase Agreement

APPLICATION NO.
2878905

Addendum (OKLAHOMA)

THIS ADDENDUM, which is entered into between U.S. Bank Equipment Finance, a division of U.S. Bank National Association ("U.S. Bank Equipment Finance") ("Lessor") and CITY OF SHAWNEE ("Lessee"), is intended to modify and supplement the Tax-Exempt Lease/Purchase Agreement or Master Tax-Exempt Lease/Purchase Agreement (as applicable) between Lessor and Lessee dated as of _____ (the "Agreement"). Capitalized terms not otherwise defined herein shall have the meanings set forth in the Agreement.

1. Notwithstanding anything to the contrary set forth in the Agreement, title to the Property subject to the Property Schedule shall remain in Lessor during the Lease Term for the Property Schedule, subject to Lessee's right under the Agreement.

2. Notwithstanding anything to the contrary set forth in the Agreement, the Property Schedule will terminate at the end of the Original Term and each Renewal Term unless Lessor and Lessee ratify the renewal thereof, and any such termination will be treated as a Nonappropriation Event under the Agreement.

IN WITNESS WHEREOF, Lessor and Lessee have caused this Addendum to be executed in their names by their duly authorized representatives.

U.S. Bank Equipment Finance
Lessor

Signature Date

Print Name Title

CITY OF SHAWNEE
Lessee

Signature Date

Print Name Title

Attest By Signature

Print Name Title

EQUIPMENT FINANCE

APPLICATION NO.
2878905

Insurance Authorization and Verification

Re: Tax-Exempt Lease/Purchase Agreement dated as of X_____, between Lessee and Lessor.

Lessor: U.S. Bank Equipment Finance
1310 Madrid Street, Ste. 101
Marshall, MN 56258

Lessee: CITY OF SHAWNEE
16 West 9th
SHAWNEE, OK 74801

TO THE LESSEE: In connection with the above-referenced Tax-Exempt Lease/Purchase Agreement and the Property Schedule thereunder each dated X_____ (the "Agreement"), Lessor requires proof in the form of this document, executed by both Lessee* and Lessee's agent, that Lessee's insurable interest in the financed property (the "Property") meets Lessor's requirements as follows, with coverage including, but not limited to, fire, extended coverage, vandalism, and theft:

LESSOR, AND ITS SUCCESSORS AND ASSIGNS, shall be covered as both ADDITIONAL INSURED and LENDER'S LOSS PAYEE with regard to all equipment financed or leased by policy holder through or from Lessor. All such insurance shall contain a provision to the effect that such insurance shall not be canceled or modified without first giving written notice thereof to Lessor and Lessee at least thirty (30) days in advance of such cancellation or modification.

Lessee must carry GENERAL LIABILITY (and/or, for vehicles, Automobile Liability) in the amount of no less than $1,000,000.00 (one million dollars).

Lessee must carry PROPERTY Insurance (or, for vehicles, Physical Damage Insurance) in an amount no less than the 'Insurable Value' $96,814.72**, with deductibles no more than $10,000.00.**

**Lessee: Please execute this form and return with your document package.* Lessor will fax this form to your insurance agency for endorsement. In lieu of agent endorsement, Lessee's agency may submit insurance certificates demonstrating compliance with all requirements. Should you have any questions, please contact U.S. Bank Equipment Finance at 800-328-5371.

By signing, Lessee authorizes the Agent named below: 1) to complete and return this form as indicated; and 2) to endorse the policy and subsequent renewals to reflect the required coverage as outlined above.

NAME OF AGENCY		NAME OF AGENT	
STREET ADDRESS	CITY	STATE	ZIP
PHONE	FAX	E-MAIL	

LESSEE ACCEPTANCE

CITY OF SHAWNEE

X

NAME OF LESSEE | SIGNATURE | TITLE | DATED

TO THE AGENT*: In lieu of providing a certificate, please execute this form in the space below and promptly fax it to Lessor at* **866-405-8329***. This fully endorsed form shall serve as proof that Lessee's insurance meets the above requirements.*

Agent hereby verifies that the above requirements have been met in regard to the Property listed below.

AGENT ACCEPTANCE

X

NAME OF AGENCY | SIGNATURE | PRINT NAME | DATED

Insurable Value: $96,814.72

ATTACHED: PROPERTY DESCRIPTION FOR THE AGREEMENT.

UPS CampusShip: View/Print Label

Ensure there are no other shipping or tracking labels attached to your package.

Fold the printed label at the solid line below.
Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

GETTING YOUR SHIPMENT TO UPS
Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
Hand the package to any UPS driver in your area.

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

FOLD HERE

COORDINATOR TEAM
8008288246
EQUIPMENT FINANCE
1310 MADRID STREET
MARSHALL MN 56258

1 LBS
1 OF 1

RS

SHIP TO:
COORDINATOR TEAM
EQUIPMENT FINANCE
1310 MADRID ST
MARSHALL MN 56258-4099

MN 562 1-01

UPS GROUND
TRACKING #: 1Z 065 27F 90 9763 4886

BILLING: P/P
DESC: customer documents
RETURN SERVICE

Reference # 1: 3000005388
Pkg Unique Identifier: vendor docs
CS 22.0.18. W/NTNV50 11.0A 03/2022*

Form **8038-GC**
(Rev. October 2021)
Department of the Treasury
Internal Revenue Service

Information Return for Small Tax-Exempt Governmental Bond Issues, Leases, and Installment Sales

▶ **Under Internal Revenue Code section 149(e)**
Caution: *If the issue price of the issue is $100,000 or more, use Form 8038-G.*
▶ **Go to *www.irs.gov/Form8038GC* for instructions and the latest information.**

OMB No. 1545-0047

Part I Reporting Authority

Check box if **Amended Return** ▶ ☐

1 Issuer's name	2 **Issuer's employer identification number (EIN)**
3 Number and street (or P.O. box if mail isn't delivered to street address)	Room/suite
4 City, town, or post office, state, and ZIP code	5 Report number *(For IRS Use Only)*
6 Name and title of officer or other employee of issuer or designated contact person whom the IRS may call for more information	7 Telephone number of officer or legal representative

Part II Description of Obligations

Check one box: ☐ Single issue ☐ Consolidated return

8a	Issue price of obligation(s) (see instructions)	8a	
b	Issue date (single issue) **or** calendar date (consolidated). Enter date in MM/DD/YYYY format (for example, 01/01/2009) (see instructions) ▶ _____		
9	Amount of the reported obligation(s) on line 8a that is:		
a	For leases for vehicles	9a	
b	For leases for office equipment	9b	
c	For leases for real property	9c	
d	For leases for other (see instructions)	9d	
e	For bank loans for vehicles	9e	
f	For bank loans for office equipment	9f	
g	For bank loans for real property	9g	
h	For bank loans for other (see instructions)	9h	
i	Used to refund prior issue(s)	9i	
j	Representing a loan from the proceeds of another tax-exempt obligation (for example, bond bank)	9j	
k	Other	9k	
10	If the issuer has designated any issue under section 265(b)(3)(B)(i)(III) (small issuer exception), check this box ▶ ☐		
11	If the issuer has elected to pay a penalty in lieu of arbitrage rebate, check this box (see instructions) ▶ ☐		
12	Vendor's or bank's name:		
13	Vendor's or bank's employer identification number:		

Signature and Consent

Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and complete. I further declare that I consent to the IRS's disclosure of the issuer's return information, as necessary to process this return, to the person(s) that I have authorized above.

▶ _____ Signature of issuer's authorized representative Date

▶ _____ Type or print name and title

Paid Preparer Use Only

Print/Type preparer's name	Preparer's signature	Date	Check ☐ if self-employed	PTIN
Firm's name ▶			Firm's EIN ▶	
Firm's address ▶			Phone no.	

Future Developments

For the latest information about developments related to Form 8038-GC and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/Form8038GC*.

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

Form 8038-GC is used by the issuers of tax-exempt governmental obligations to provide the IRS with the information required by section 149(e) and to monitor the requirements of sections 141 through 150.

Who Must File

Issuers of tax-exempt governmental obligations with issue prices of less than $100,000 must file Form 8038-GC.

Issuers of a tax-exempt governmental obligation with an issue price of $100,000 or more must file Form 8038-G, Information Return for Tax-Exempt Governmental Bonds.

Filing a separate return for a single issue. Issuers have the option to file a separate Form 8038-GC for any tax-exempt governmental obligation with an issue price of less than $100,000.

An issuer of a tax-exempt bond used to finance construction expenditures must file a separate Form 8038-GC for each issue to give notice to the IRS that an election was made to pay a penalty in lieu of arbitrage rebate. See the instructions for line 11, later.

Filing a consolidated return for multiple issues. For all tax-exempt governmental obligations with issue prices of less than $100,000 that aren't reported on a separate Form 8038-GC, an issuer must file a consolidated information return including all such issues issued within the calendar year.

Thus, an issuer may file a separate Form 8038-GC for each of a number of small issues and report the remainder of small issues issued during the calendar year on one consolidated Form 8038-GC. However, if the issue is a construction issue, a separate Form 8038-GC must be filed to give the IRS notice of the election to pay a penalty in lieu of arbitrage rebate.

When To File

To file a separate return for a single issue, file Form 8038-GC on or before the 15th day of the 2nd calendar month after the close of the calendar quarter in which the issue is issued.

To file a consolidated return for multiple issues, file Form 8038-GC on or before February 15 of the calendar year following the year in which the issue is issued.

Late filing. An issuer may be granted an extension of time to file Form 8038-GC under section 3 of Rev. Proc. 2002-48, 2002-37 I.R.B. 531, if it is determined that the failure to file on time isn't due to willful neglect. Write at the top of the form, "Request for Relief under section 3 of Rev. Proc. 2002-48." Attach to the Form 8038-GC a letter briefly stating why the form wasn't submitted to the IRS on time. Also, indicate whether the obligation in question is under examination by the IRS. Don't submit copies of any bond documents, leases, or installment sale documents. See *Where To File* next.

Where To File

File Form 8038-GC and any attachments at the following address.

Department of the Treasury
Internal Revenue Service Center
Ogden, UT 84201

Private delivery services (PDS). You can use certain PDS designated by the IRS to meet the "timely mailing as timely filing/paying" rule for tax returns and payments. These PDS include only the following:

- DHL Express (DHL): DHL Same Day Service.
- Federal Express (FedEx): FedEx Priority Overnight, FedEx Standard Overnight, FedEx 2Day, FedEx International Priority, and FedEx International First.
- United Parcel Service (UPS): UPS Next Day Air, UPS Next Day Air Saver, UPS 2nd Day Air, UPS 2nd Day Air A.M., UPS Worldwide Express Plus, and UPS Worldwide Express.

The PDS can tell you how to get written proof of the mailing date.

Other Forms That May Be Required

For rebating arbitrage (or paying a penalty in lieu of arbitrage rebate) to the federal government, use Form 8038-T, Arbitrage Rebate, Yield Reduction and Penalty in Lieu of Arbitrage Rebate. For private activity bonds, use Form 8038, Information Return for Tax-Exempt Private Activity Bond Issues.

For a tax-exempt governmental obligation with an issue price of $100,000 or more, use Form 8038-G.

Rounding to Whole Dollars

You may show the money items on this return as whole-dollar amounts. To do so, drop any amount less than 50 cents and increase any amount from 50 to 99 cents to the next higher dollar. For example, $1.49 becomes $1 and $2.50 becomes $3. If two or more amounts must be added to figure the amount to enter on a line, include cents when adding the amounts and round off only the total.

Definitions

Obligations. This refers to a single tax-exempt governmental obligation if Form 8038-GC is used for separate reporting or to multiple tax-exempt governmental obligations if the form is used for consolidated reporting.

Tax-exempt obligation. This is any obligation including a bond, installment purchase agreement, or financial lease on which the interest is excluded from income under section 103.

Tax-exempt governmental obligation. A tax-exempt obligation that isn't a private activity bond (see below) is a tax-exempt governmental obligation. This includes a bond issued by a qualified volunteer fire department under section 150(e).

Private activity bond. This includes an obligation issued as part of an issue in which:

- More than 10% of the proceeds are to be used for any private activity business use, and
- More than 10% of the payment of principal or interest of the issue is either (a) secured by an interest in property to be used for a private business use (or payments for such property) or (b) to be derived from payments for property (or borrowed money) used for a private business use.

It also includes a bond, the proceeds of which (a) are to be used to make or finance loans (other than loans described in section 141(c)(2)) to persons other than governmental units and (b) exceeds the lesser of 5% of the proceeds or $5 million.

Issue. Generally, obligations are treated as part of the same issue only if they are issued by the same issuer, on the same date, and as part of a single transaction, or a series of related transactions. However, obligations issued during the same calendar year (a) under a loan agreement under which amounts are to be advanced periodically (a "draw-down loan") or (b) with a term not exceeding 270 days, may be treated as part of the same issue if the obligations are equally and ratably secured under a single indenture or loan agreement and are issued under a common financing arrangement (for example, under the same official statement periodically updated to reflect changing factual circumstances). Also, for obligations issued under a draw-down loan that meets the requirements of the preceding sentence, obligations issued during different calendar years may be treated as part of the same issue if all of the amounts to be advanced under the draw-down loan are reasonably expected to be advanced within 3 years of the date of issue of the first obligation. Likewise, obligations (other than private activity bonds) issued under a single agreement that is in the form of a lease or installment sale may be treated as part of the same issue if all of the property covered by that agreement is reasonably expected to be delivered within 3 years of the date of issue of the first obligation.

Arbitrage rebate. Generally, interest on a state or local bond isn't tax-exempt unless the issuer of the bond rebates to the United States arbitrage profits earned from investing proceeds of the bond in higher yielding nonpurpose investments. See section 148(f).

Construction issue. This is an issue of tax-exempt bonds that meets both of the following conditions:

1. At least 75% of the available construction proceeds of the issue are to be used for construction expenditures with respect to property to be owned by a governmental unit or a 501(c)(3) organization, and

2. All of the bonds that are part of the issue are qualified 501(c)(3) bonds, bonds that aren't private activity bonds, or private activity bonds issued to finance property to be owned by a governmental unit or a 501(c)(3) organization.

In lieu of rebating any arbitrage that may be owed to the United States, the issuer of a construction issue may make an irrevocable election to pay a penalty. The penalty is equal to 1-1/2% of the amount of construction proceeds that do not meet certain spending requirements. See section 148(f)(4)(C) and the Instructions for Form 8038-T.

Specific Instructions

In general, a Form 8038-GC must be completed on the basis of available information and reasonable expectations as of the date of issue. However, forms that are filed on a consolidated basis may be completed on the basis of information readily available to the issuer at the close of the calendar year to which the form relates, supplemented by estimates made in good faith.

Part I—Reporting Authority

Amended return. An issuer may file an amended return to change or add to the information reported on a previously filed return for the same date of issue. If you are filing to correct errors or change a previously filed return, check the *Amended Return* box in the heading of the form.

The amended return must provide all the information reported on the original return, in addition to the new corrected information. Attach an explanation of the reason for the amended return and write across the top "Amended Return Explanation."

Line 1. The issuer's name is the name of the entity issuing the obligations, not the name of the entity receiving the benefit of the financing. In the case of a lease or installment sale, the issuer is the lessee or purchaser.

Line 2. An issuer that doesn't have an employer identification number (EIN) should apply for one online by visiting the IRS website at *www.irs.gov/EIN*. The organization may also apply for an EIN by faxing or mailing Form SS-4 to the IRS.

Lines 3 and 4. Enter the issuer's address or the address of the designated contact person listed on line 6. If the issuer wishes to use its own address and the issuer receives its mail in care of a third party authorized representative (such as an accountant or attorney), enter on the street address line "C/O" followed by the third party's name and street address or P.O. box. Include the suite, room, or other unit number after the street address. If the post office doesn't deliver

mail to the street address and the issuer has a P.O. box, show the box number instead of the street address. If a change in address occurs after the return is filed, use Form 8822, Change of Address, to notify the IRS of the new address.

Note: The address entered on lines 3 and 4 is the address the IRS will use for all written communications regarding the processing of this return, including any notices. By authorizing a person other than an authorized officer or other employee of the issuer to communicate with the IRS and whom the IRS may contact about this return, the issuer authorizes the IRS to communicate directly with the individual listed on line 6, whose address is entered on lines 3 and 4 and consents to disclose the issuer's return information to that individual, as necessary, to process this return.

Line 5. This line is for IRS use only. Don't make any entries in this box.

Part II—Description of Obligations

Check the appropriate box designating this as a return on a single issue basis or a consolidated return basis.

Line 8a. The issue price of obligations is generally determined under Regulations section 1.148-1(b). Thus, when issued for cash, the issue price is the price at which a substantial amount of the obligations are sold to the public. To determine the issue price of an obligation issued for property, see sections 1273 and 1274 and the related regulations.

Line 8b. For a single issue, enter the date of issue (for example, 03/15/2020 for a single issue issued on March 15, 2020), generally the date on which the issuer physically exchanges the bonds that are part of the issue for the underwriter's (or other purchaser's) funds; for a lease or installment sale, enter the date interest starts to accrue. For issues reported on a consolidated basis, enter the first day of the calendar year during which the obligations were issued (for example, for calendar year 2020, enter 01/01/2020).

Lines 9a through 9h. Complete this section if property other than cash is exchanged for the obligation, for example, acquiring a police car, a fire truck, or telephone equipment through a series of monthly payments. (This type of obligation is sometimes referred to as a "municipal lease.") Also, complete this section if real property is directly acquired in exchange for an obligation to make periodic payments of interest and principal.

Don't complete lines 9a through 9d if the proceeds of an obligation are received in the form of cash even if the term "lease" is used in the title of the issue. For lines 9a through 9d, enter the amount on the appropriate line that represents a lease or installment purchase. For line 9d, enter the type of item that is leased. For lines 9e through 9h, enter the amount on the appropriate line that represents a bank loan. For line 9h, enter the type of bank loan.

Lines 9i and 9j. For line 9i, enter the amount of the proceeds that will be used to pay principal, interest, or call premium on any other issue of bonds, including proceeds that will be used to fund an escrow account for this purpose. Several lines may apply to a particular obligation. For example, report on lines 9i and 9j obligations used to refund prior issues which represent loans from the proceeds of another tax-exempt obligation.

Line 9k. Enter on line 9k the amount on line 8a that doesn't represent an obligation described on lines 9a through 9j.

Line 10. Check this box if the issuer has designated any issue as a "small issuer exception" under section 265(b)(3)(B)(i)(III).

Line 11. Check this box if the issue is a construction issue and an irrevocable election to pay a penalty in lieu of arbitrage rebate has been made on or before the date the bonds were issued. The penalty is payable with a Form 8038-T for each 6-month period after the date the bonds are issued. Don't make any payment of penalty in lieu of rebate with Form 8038-GC. See Rev. Proc. 92-22, 1992-1 C.B. 736, for rules regarding the "election document."

Line 12. Enter the name of the vendor or bank who is a party to the installment purchase agreement, loan, or financial lease. If there are multiple vendors or banks, the issuer should attach a schedule.

Line 13. Enter the employer identification number of the vendor or bank who is a party to the installment purchase agreement, loan, or financial lease. If there are multiple vendors or banks, the issuer should attach a schedule.

Signature and Consent

An authorized representative of the issuer must sign Form 8038-GC and any applicable certification. Also, write the name and title of the person signing Form 8038-GC. The authorized representative of the issuer signing this form must have the authority to consent to the disclosure of the issuer's return information, as necessary to process this return, to the person(s) that has been designated in this form.

Note: If the issuer authorizes on line 6 the IRS to communicate with a person other than an officer or other employee of the issuer (such authorization shall include contact both in writing regardless of the address entered on lines 3 and 4, and by telephone), by signing this form, the issuer's authorized representative consents to the disclosure of the issuer's return information, as necessary to process this return, to such person.

Paid Preparer

If an authorized representative of the issuer filled in its return, the paid preparer's space should remain blank. Anyone who prepares the return but does not charge the organization shouldn't sign the return. Certain others who prepare the return shouldn't sign. For example, a regular, full-time employee of the issuer, such as a clerk, secretary, etc., shouldn't sign.

Generally, anyone who is paid to prepare a return must sign it and fill in the other blanks in the *Paid Preparer Use Only* area of the return. A paid preparer cannot use a social security number in the *Paid Preparer Use Only* **box**. The paid preparer must use a preparer tax identification number (PTIN). If the paid preparer is self-employed, the preparer should enter his or her address in the box.

The paid preparer must:

- Sign the return in the space provided for the preparer's signature, and
- Give a copy of the return to the issuer.

Paperwork Reduction Act Notice

We ask for the information on this form to carry out the Internal Revenue laws of the United States. You are required to give us the information. We need it to ensure that you are complying with these laws.

You are not required to provide the information requested on a form that is subject to the Paperwork Reduction Act unless the form displays a valid OMB control number. Books or records relating to a form or its instructions must be retained as long as their contents may become material in the administration of any Internal Revenue law. Generally, tax returns and return information are confidential, as required by section 6103.

The time needed to complete and file this form will vary depending on individual circumstances. The estimated burden for tax exempt organizations filing this form is approved under OMB control number 1545-0047 and is included in the estimates shown in the instructions for their information return.

If you have suggestions for making this form simpler, we would be happy to hear from you. You can send us comments through *www.irs.gov/FormComments*. Or you can write to:

Internal Revenue Service
Tax Forms and Publications
1111 Constitution Ave. NW, IR-6526
Washington, DC 20224

Do not send Form 8038-GC to this address. Instead, see *Where To File*, earlier.

UPS CampusShip: View/Print Label

Ensure there are no other shipping or tracking labels attached to your package.

Fold the printed label at the solid line below.
Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

GETTING YOUR SHIPMENT TO UPS
Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
Hand the package to any UPS driver in your area.

Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.

FOLD HERE

INTERNAL REVENUE SERVICE CENTE
DEPARTMENT OF TREASURY
1973 RULON WHITE BLVD
OGDEN UT 84201-1000

1 OF 1

LTR

RS

SHIP TO:
INTERNAL REVENUE SERVICE CENTER
DEPARTMENT OF TREASURY
1973 RULON WHITE BLVD
OGDEN UT 84201-1000

UT 844 0-01

UPS NEXT DAY AIR 1

TRACKING #: 1Z 065 27F 84 9894 0457

BILLING: P/P
DESC: 8032
RETURN SERVICE

Reference # 1: 3000005388
Pkg Unique Identifier: 8038

CS 22.0.18.

W/NTNV50 44.0A 10/2021*

TM

APX™ 6000
"AN" RADIO MODELS END-OF-SUPPORT NOTICE

OVERVIEW

In 2016, the APX 6000 family (APX 6000, APX 6000Li, APX 6000XE, APX 5000, and SRX2200) evolved to support newer technologies. These enhancements required a revision in hardware from an "AN" model suffix to a "BN" model suffix.

The purpose of this notification is to inform customers of an end of support of the APX 6000 family AN, or legacy, radio models on December 31, 2019. The APX 6000 family legacy models are no longer orderable. The APX 6000 family can continue to be purchased on the BN, or "Enhanced," models listed below.

END-OF-SUPPORT DATE:

To align with 5-year support: December 31, 2021 (or while supplies last).

NEW FEATURE REQUEST/DEVELOPMENT:

To conclude December 31, 2019.

REPLACEMENT PRODUCT:

The APX 6000 family BN models are available for order. They offer the same features, functionalities and options as the APX 6000 legacy AN models, but with new features for an evolving customer need.

HARDWARE IMPACT:

Be advised that product repair support of the AN models is dependent on the availability of replacement parts. Motorola will make commercially reasonable efforts to repair products until the end of their respective support dates. Aftermarket product support will be available for the APX 6000 family AN radio models via commercially reasonable efforts through Customer Fulfillment Centers (CFC).

SOFTWARE IMPACT:

New features and enhancements will no longer be offered on AN models after December 31, 2019. The BN models do not share the same codeplugs as the AN models. There will be no additional new features developed on the AN models after December 31st, 2019.

MOTOROLA SOLUTIONS

MODELS/OPTIONS END-OF-SUPPORT

Listed below are the APX 6000/XE/Li models –

APX 6000 MODELS

END-OF-SUPPORT RADIO MODEL	DESCRIPTION	REPLACEMENT RADIO MODEL
H98UCD9PW5AN, H98UCD9PW5_N	APX 6000 7/800 MHZ MODEL 1.5 PORTABLE	H98UCD9PW5BN
H98UCF9PW6AN, H98UCF9PW6_N	APX 6000 7/800 MHZ MODEL 2.5 PORTABLE	H98UCF9PW6BN
H98UCH9PW7AN, H98UCH9PW7_N	APX 6000 7/800 MHZ MODEL 3.5 PORTABLE	H98UCH9PW7BN
H98KGD9PW5AN, H98KGD9PW5_N	APX 6000 VHF MHZ MODEL 1.5 PORTABLE	H98KGD9PW5BN
H98KGF9PW6AN, H98KGF9PW6_N	APX 6000 VHF MHZ MODEL 2.5 PORTABLE	H98KGF9PW6BN
H98KGH9PW7AN, H98KGH9PW7_N	APX 6000 VHF MHZ MODEL 3.5 PORTABLE	H98KGH9PW7BN
H98QDD9PW5AN, H98QDD9PW5_N	APX 6000 UHF R1 MODEL 1.5 PORTABLE	H98QDD9PW5BN
H98QDF9PW6AN, H98QDF9PW6_N	APX 6000 UHF R1 MODEL 2.5 PORTABLE	H98QDF9PW6BN
H98QDH9PW7AN, H98QDH9PW7_N	APX 6000 UHF R1 MODEL 3.5 PORTABLE	H98QDH9PW7BN
H98SDD9PW5AN, H98SDD9PW5_N	APX 6000 UHF R2 MODEL 1.5 PORTABLE	H98SDD9PW5BN
H98SDF9PW6AN, H98SDF9PW6_N	APX 6000 UHF R2 MODEL 2.5 PORTABLE	H98SDF9PW6BN
H98SDH9PW7AN, H98SDH9PW7_N	APX 6000 UHF R2 MODEL 3.5 PORTABLE	H98SDH9PW7BN

ORDERED WITH OR WITHOUT—

OPTION	DESCRIPTION
QA02006	ENH: APX 6000XE RUGGED RADIO
Q811	ENH: LI DIGITAL CONVENTIONAL
QA02829	ENH: LI ANALOG CONVENTIONAL
Q443	ENH: LI ANALOG 3600 TRUNKING
QA02756	ENH: LI 9600 OR 3600 SINGLE SYSTEM DIGITAL TRUNKING
QA02812	ENH: LI P25 9600 BAUD TRUNKING W/ INTEROPERABILITY

APX 5000 MODELS

END-OF-SUPPORT RADIO MODEL	DESCRIPTION	REPLACEMENT RADIO MODEL
H98UCD9PW5ANI, H98UCD9PW5_NI	APX 5000 7/800 MHZ MODEL 1.5 PORTABLE	H98UCD9PW5BN
H98UCF9PW6ANI, H98UCF9PW6_NI	APX 5000 7/800 MHZ MODEL 2.5 PORTABLE	H98UCF9PW6BNI
H98UCH9PW7ANI, H98UCH9PW7_NI	APX 5000 7/800 MHZ MODEL 3.5 PORTABLE	H98UCH9PW7BNI
H98KGD9PW5ANI, H98KGD9PW5_NI	APX 5000 VHF MHZ MODEL 1.5 PORTABLE	H98KGD9PW5BNI
H98KGF9PW6ANI, H98KGF9PW6_NI	APX 5000 VHF MHZ MODEL 2.5 PORTABLE	H98KGF9PW6BNI
H98KGH9PW7ANI, H98KGH9PW7_NI	APX 5000 VHF MHZ MODEL 3.5 PORTABLE	H98KGH9PW7BNI
H98QDD9PW5ANI, H98QDD9PW5_NI	APX 5000 UHF R1 MODEL 1.5 PORTABLE	H98QDD9PW5BNI
H98QDF9PW6ANI, H98QDF9PW6_NI	APX 5000 UHF R1 MODEL 2.5 PORTABLE	H98QDF9PW6BNI
H98QDH9PW7ANI, H98QDH9PW7_NI	APX 5000 UHF R1 MODEL 3.5 PORTABLE	H98QDH9PW7BNI
H98SDD9PW5ANI, H98SDD9PW5_NI	APX 5000 UHF R2 MODEL 1.5 PORTABLE	H98SDD9PW5BNI
H98SDF9PW6ANI, H98SDF9PW6_NI	APX 5000 UHF R2 MODEL 2.5 PORTABLE	H98SDF9PW6BNI
H98SDH9PW7ANI, H98SDH9PW7_NI	APX5000 UHF R2 MODEL 3.5 PORTABLE	H98SDH9PW7BNI

SRX2200 MODELS

END-OF-SUPPORT RADIO MODEL	DESCRIPTION	REPLACEMENT RADIO MODEL
H99UCD9PW5AN, H99UCD9PW5_N	SRX2200 7/800 MHZ MODEL 1.5 PORTABLE	H99UCD9PW5BN
H99UCH9PW7AN, H99UCH9PW7_N	SRX2200 7/800 MHZ MODEL 3.5 PORTABLE	H99UCH9PW7BN
H99KGD9PW5AN, H99KGD9PW5_N	SRX2200 VHF MHZ MODEL 1.5 PORTABLE	H99KGD9PW5BN
H99KGH9PW7AN, H99KGH9PW7_N	SRX2200 VHF MHZ MODEL 3.5 PORTABLE	H99KGH9PW7BN
H99QDD9PW5AN, H99QDD9PW5_N	SRX2200 UHF R1 MODEL 1.5 PORTABLE	H99QDD9PW5BN
H99QDH9PW7AN, H99QDH9PW7_N	SRX2200 UHF R1 MODEL 3.5 PORTABLE	H99QDH9PW7BN

ORDERED WITH OR WITHOUT—

OPTION	DESCRIPTION
H553	ADD: ULTRA LOW POWER RADIO TRIGGER

CONTACT INFORMATION

If you have specific questions regarding this notification,
please contact your Motorola Solutions Account Representative.

MOTOROLA SOLUTIONS

Motorola Solutions, Inc. 500 West Monroe Street, Chicago, Il 60661 U.S.A. **motorolasolutions.com**

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Regular Board of Commissioners **6.**

Meeting Date: 04/04/2022

Ordinance

Submitted By: Kacie Eck, City Clerk

Department: City Clerk

Information

Title of Item for Agenda

Consideration and possible action of an ordinance regarding an amendment to the City of Shawnee Plan adopting the revised and restated OkMRF (Oklahoma Municipal Retirement Fund) Master Defined Contribution Retirement Plan.

Attachments

Memo

Ordinance

Joinder Agreement

Human Resources

16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: March 25, 2022

To: City Commission

From: Jennifer Greenland, HR Director

Subject: Consideration and Possible Action on Ordinance Regarding an Amendment to the City of Shawnee Plan Adopting the Revised and Restated OkMRF Master Defined Contribution Retirement Plan.

Background: Full-time, non-union employees participate in the Oklahoma Municipal Retirement Fund (OkMRF). The Commission is the governing body for the Shawnee Plans.

Shawnee has two types of plans, Defined Benefit (DB) and Defined Contribution (DC). The DC includes the City of Shawnee Plan included in this agenda item.

OkMRF must follow a six-year filing cycle for preapproved plans in order to retain plan qualification and obtain a determination letter from the IRS. The IRS identified the plan as acceptable under Internal Revenue Code Section 401. The OkMRF Board approved the Amended and Restated Defined Contribution Master Plan and Joinder Agreement during their meeting in December 2021. The governing body now needs to approve and adopt the documents for our plan.

A summary of material changes was created by John A. Paphronis with McAfee & Taft.

Financial Impact: None

Attachment: Summary of Material Changes, IRS determination letter, and Master Plan

Staff Recommendation: Approval of the item.

McAFEE & TAFT
A PROFESSIONAL CORPORATION

8TH FLOOR • TWO LEADERSHIP SQUARE
211 NORTH ROBINSON • OKLAHOMA CITY, OK 73102-7103
(405) 235-9621 • FAX (405) 235-0439
www.mcafeetaft.com

MEMORANDUM

TO: Oklahoma Municipal Retirement Fund

FROM: McAfee & Taft A Professional Corporation
(John A. Papahronis)

DATE: November 12, 2021

RE: Oklahoma Municipal Retirement Fund Master Defined Contribution Plan and Joinder Agreement—Summary of Material Changes

The following summary compares the current version of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan and Joinder Agreement with the version recently approved by the Internal Revenue Service:

A. Master Defined Contribution Plan

Sec.	Feature	Current Version	Newly-Approved Version
1.1	Purpose	States the purpose of the Plan.	Adds IRS required sentence that the plan is intended to qualify as a governmental plan.
1.3	Exclusive Benefit	None	Added IRS required language that the Plan is for the exclusive benefit of employees. Expanded language that was previously in 1.1.
2.1(m)	Definition of Compensation	Includes historical language required by IRS	Deletes historical IRS required language that is obsolete.
2.1(r)	Definition of Employee	None	Includes a definition of Employee by cross referencing Joinder Agreement.
4.5	Change of Rate of Voluntary Nondeductible Contributions	Permits Participant to change rate of payroll deduction	Deletes reference to minimum and maximum rates.

4.8(d)(i)(3)	Roth Elective Deferrals	Provisions describing permitted Roth Elective Deferrals	Added IRS required language regarding correction of excess contributions of Roth Elective Deferrals.
5.11(a)(iv)	Maximum Permissible Amount	Definition for IRS limit	Updated IRS dollar limit for current amount.
6.12	Loss of Benefits for Cause	Reserved Section holder	Deleted per request of IRS.
6.17	Forfeiture of Benefits	Reserved Section holder	Deleted per request of IRS.
8.5	Provider's Power to Amend	Authority of Volume Submitter Practitioner to Amend for Adopting Employers	Modified to reflect current IRS terminology in accordance with Rev. Proc. 2017-41.
10.5	Benefits Payable to Incompetents	Protocol for benefit payments to incompetents	Modified to provide payments will be made to valid power of attorney, court appointed guardian, or other person authorized under state law.
11.11	Supersession of Inconsistent Provisions	Incorporates provisions of Trust Indenture	IRS required deletion of incorporation of provisions of Trust Indenture.

B. Joinder Agreement

Sec.	Feature	Current Version	Newly-Approved Version
8.	Forfeitures	Timing of allocation of forfeitures not specified	Timing of allocation specified
Sig. page	Required Disclosure re: IRS Approval	IRS required disclosure regarding the use and restrictions of IRS Preapproved Plan	Update language to meet current IRS requirements

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

TAX EXEMPT AND
GOVERNMENT ENTITIES
DIVISION

Plan Description: Non-Standardized Pre-Approved Profit Sharing Plan With CODA
FFN: 317D1080001-001 Case: 201800527 EIN: 73-0781676
Letter Serial No: Q702320a
Date of Submission: 12/18/2018

MCAFEE & TAFT
211 NORTH ROBINSON
TWO LEADERSHIP SQUARE, 10TH FLOOR
OKLAHOMA CITY, OK 73102

Contact Person:
Janell Hayes
Telephone Number:
513-975-6319
In Reference To: TEGE:EP:7521
Date: 06/30/2020

Dear Applicant:

In our opinion, the form of the plan identified above is acceptable for use by employers for the benefit of their employees under Internal Revenue Code (IRC) Section 401.

We considered the changes in qualification requirements in the 2017 Cumulative List of Notice 2017-37, 2017-29 Internal Revenue Bulletin (IRB) 89. Our opinion relates only to the acceptability of the form of the plan under the IRC. We did not consider the effect of other federal or local statutes.

You must provide the following to each employer who adopts this plan:
. A copy of this letter
. A copy of the approved plan
. Copies of any subsequent amendments including their dates of adoption
. Direct contact information including address and telephone number of the plan provider

Our opinion on the acceptability of the plan's form is a determination as to the qualification of the plan as adopted by a particular employer only under the circumstances, and to the extent, described in Revenue Procedure (Rev. Proc.) 2017-41, 2017-29 I.R.B. 92. The employer who adopts this plan can generally rely on this letter to the extent described in Rev. Proc. 2017-41. Thus, Employee Plans Determinations, except as provided in Section 12 of Rev. Proc. 2020-4, 2020-01 I.R.B. 148 (as updated annually), will not issue a determination letter to an employer who adopts this plan. Review Rev. Proc. 2020-4 to determine the eligibility of an adopting employer, and the items needed, to submit a determination letter application. The employer must also follow the terms of the plan in operation.

Except as provided below, our opinion doesn't apply to the requirements of IRC Sections 401(a)(4), 401(l), 410(b), and 414(s). Our opinion doesn't apply to IRC Sections 415 and 416 if an employer maintains or ever maintained another qualified plan for one or more employees covered by this plan. For this purpose, we will not consider the employer to have maintained another defined contribution plan provided both of the following are true:
. The employer terminated the other plan before the effective date of this plan
. No annual additions have been credited to any participant's account under the other plan as of any date within the limitation year of this plan

Also, for this purpose, we'll consider an employer as maintaining another defined contribution plan, if the employer maintains any of the following:
. A welfare benefit fund defined in IRC Section 419(e), which provides post-retirement medical benefits allocated to separate accounts for key employees as defined in IRC Section 419A(d)

. An individual medical account as defined in IRC Section 415(l)(2), which is part of a pension or annuity plan maintained by the employer
. A simplified employee pension plan

Our opinion doesn't apply to Treasury Regulations Section 1.401(a)-1(b)(2) requirements for a money purchase plan or target benefit plan where the normal retirement age under the employer's plan is lower than age 62.

Our opinion doesn't constitute a determination that the plan is an IRC Section 414(d) governmental plan. This letter is not a ruling with respect to the tax treatment to be given contributions which are picked up by the governmental employing unit within the meaning of IRC Section 414(h)(2).

Our opinion doesn't constitute a determination that the plen is an IRC Section 414(e) church plan.

Our opinion may not be relied on by a non-electing church plan for rules governing pre-ERISA participation and coverage.

Our opinion applies to the requirements of IRC Section 410(b) if 100 percent of all non-excludable employees benefit under the plan.

Employers who choose a safe harbor allocation formula and a safe harbor compensation definition may also rely on this opinion letter for the non-discriminatory amounts requirement under IRC Section 401(a)(4).

If this plan includes a cash or deferred arrangement (CODA) or otherwise provides for contributions subject to IRC Sections 401(k) and/or 401(m), the employer may rely on the opinion letter regarding the form of the non-discrimination tests of IRC Sections 401(k)(3) and 401(m)(2), if the employer uses a safe harbor compensation definition. For plans described in IRC Sections 401(k)(12) or (13) and/or 401(m)(11) or (12), employers may rely on the opinion letter regarding whether the plan's form satisfies the requirements of those sections unless the plan provides for the safe harbor contribution to be made under another plan. For SIMPLE plans described in IRC Sections 401(k)(11) and 401(m)(10), employers may also rely on the opinion letter regarding whether the plan's form satisfies the requirements of those sections.

The provisions of this plan override any conflicting provision contained in the trust or custodial account documents used with the plan, and an adopting employer may not rely on this letter to the extent that provisions of a trust or custodial account that are a separate portion of the plan override or conflict with the provisions of the plan document. This opinion letter does not cover any provisions in trust or custodial account documents.

An employer who adopts this plan may not rely on this letter when:
. the plan is being used to amend or restate a plan of the employer which was not previously qualified
. the employer's adoption of the plan precedes the issuance of the letter
. the employer doesn't correctly complete the adoption agreement or other elective provisions in the plan
. the plan is not identical to the pre-approved plan (that is, the employer has made amendments that cause the plan not to be considered identical to the pre-approved plan, as described in Section 8.03 of Rev. Proc. 2017-41)

Our opinion doesn't apply to what is contained in any documents referenced outside the plan or adoption agreement, if applicable, such as a collective bargaining agreement.

Our opinion doesn't consider issues under Title I of the Employee Retirement Income Security Act (ERISA) which are administered by the Department of Labor.

If you, the pre-approved plan provider, have questions about the status of this case, you can call the telephone number at the top of the first page of this letter. This number is only for the provider's use.

Individual participants or adopting eligible employers with questions about the plan should contact you.

You must include your address and telephone number on the pre-approved plan or the plan's adoption agreement, if applicable, so that adopting employers can contact you directly.

If you write to us about this plan, provide your telephone number and the best time to call if we need more information. Whether you call or write, refer to the letter serial number and file folder number at the top of the first page of this letter.

Let us know if you change or discontinue sponsorship of this plan.

Keep this letter for your records.

Sincerely Yours,

Khin M. Chow

Khin M. Chow
Director, EP Rulings & Agreements

Letter 6186 (June-2020)
Catalog Number 72434C

Exhibit B

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN

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ARTICLE I.
Purpose and Organization

1.1 **Purpose**: The purpose of this Plan is to encourage the loyalty and continuity of service of the Participants, to provide retirement benefits for all eligible Employees of the Employer, as hereinafter defined, who complete a period of faithful service and become eligible hereunder, and to qualify the Plan under Section 401(a) of the Code. It is intended that the Plan satisfy Section 401(a) of the Code by meeting the requirements of Section 414(d) of the Code. The benefits provided by this Plan will be paid from a Fund established by the Employer and will be in addition to the benefits Employees are entitled to receive under any other programs of the Employer and from the Federal Social Security Act.

The design type of this Plan is a profit sharing plan. To the extent this Plan is a governmental retiree benefit plan under Section 401(a)(24) of the Code, and prior to the termination of the Plan and satisfaction of all liabilities of the Plan, no part of the corpus or income of the Fund shall be used for, or diverted to, purposes other than for the exclusive benefit of the Plan participants and their beneficiaries.

1.2 **Parties**: The Oklahoma Municipal Retirement Fund hereby adopts and establishes this Plan for the benefit of Employees of those Employers, as defined herein, formed, chartered or incorporated under the laws of the State of Oklahoma, who wish to adopt it by executing a Joinder Agreement which incorporates this Plan by reference.

1.3 **Exclusive Benefit:** This Plan and the separate related Fund forming a part hereof are established and shall be maintained for the exclusive benefit of the eligible Employees of the Employer and their beneficiaries. Except as provided under Section 11.12, the Employer does not have any beneficial interest in any asset of the Fund and no part of any asset in the Fund may ever revert to or be repaid to the Employer, either directly or indirectly; nor, prior to the satisfaction of all liabilities with respect to the Participants and their Beneficiaries under the Plan, may any part of the corpus or income of the Fund, or any asset of the Fund, be (at any time) used for, or diverted to, purposes other than the exclusive benefit of the Participants or their Beneficiaries and for defraying reasonable expenses of administering the Plan.

ARTICLE II.
Definitions and Construction

2.1 **Definitions**: Where the following words and phrases appear in this Plan, they shall have the respective meanings set forth below, unless their context clearly indicates to the contrary:

(a) Account: One or more of several records maintained to record the interest in the Plan of each Participant and Beneficiary, and shall include any or all, where appropriate, of the following: (i) Municipality Contribution Account, (ii) Participant Deductible Contribution Account, (iii) Participant Deferred Compensation Contribution Account, (iv) Participant Mandatory Contribution Account, (v) Participant Nondeductible Contribution Account, (vi) Participant Roth Contribution Account, (vii) Pick-Up Contribution Account, (viii) Participant Rollover Account, (ix) Catch-Up Contribution Account, and (x) Loan Account.

(b) Adjustment Factor: The cost of living adjustment factor prescribed by the Secretary of the Treasury under Section 415(d) of the Code for years beginning after December 31, 1987, as applied to such items and in such manner as the Secretary shall provide.

(c) Amount(s) Forfeited: That portion of a terminated Participant's Municipality Contribution Account to which such Participant is not entitled because of insufficient Service.

(d) Authorized Agent: The City Clerk of the Employer or such other person designated by the Employer to carry out the efficient operation of the Plan at the local level.

(e) Authorized Leave of Absence: Any absence authorized by the Employer under the Employer's standard personnel practices applied to all persons under similar circumstances in a uniform manner, including any required military service during which a Participant's re-employment rights are protected by law; provided that he resumes employment with the Employer within the applicable time period established by the Employer or by law.

(f) Beneficiary: Any person or entity designated or deemed designated by a Participant as provided in Section 6.11 hereof.

(g) Break in Service: The expiration of ninety (90) days from the date the Participant last performed Service for the Employer for which such Participant was entitled to wages as defined in Section 3121(a) of the Code unless the Participant is on Authorized Leave of Absence. If a Participant does not resume employment with the Employer upon the expiration of an Authorized Leave of Absence, the Participant will be deemed to be absent from work on the first day of his Authorized Leave of Absence for purposes of determining if the Participant has a Break in Service.

For determining the amounts to be forfeited from a Participant's account under Section 6.6, any periods of employment with the Employer during which the Participant was not considered an Employee under the Plan shall not be considered as a Break in Service that causes a forfeiture unless the Participant was covered under a state retirement system or any other program outside the Oklahoma Municipal Retirement Fund System.

(h) Catch-Up Contributions: A Participant's contributions described in Section 4.8(c) herein.

(i) Catch-Up Contribution Account: The Account maintained for a Participant in which any Catch-Up Contributions are recorded.

(j) City Council: The City Council or Board of Trustees of the Employer or other duly qualified and acting governing authority of the Employer.

(k) Code: The Internal Revenue Code of 1986, as amended from time to time.

(l) Committee: The City Council of the Municipality, which shall act as the Plan Administrator of the Plan as provided for under Article X hereof.

(m) Compensation: Compensation means wages for federal income tax withholding purposes, as defined under Code §3401(a), plus all other payments to an Employee in the course of the Employer's trade or business, for which the Employer must furnish the Employee a written statement under Code §§6041, 6051 and 6052, but determined without regard to any rules that limit the remuneration included in wages based on the nature or location of the employment or services performed (such as the exception for agricultural labor in Code §3401(a)(2)). The Employer in Section 4 of its Joinder Agreement may specify modifications to the definition of Compensation, for purposes of contribution allocations under the Plan. For purposes of determining a Participant's compensation, any election by such Participant to reduce his regular cash remuneration under Code Sections 125, 401(k), 414(h), 403(b) or 457 shall be disregarded.

(1) Limitations. The annual compensation of each Participant taken into account in determining allocations for any Plan Year beginning after December 31, 2001, shall not exceed $280,000, as adjusted for cost-of-living increases in accordance with Section 401(a)(17)(B) of the Code. Annual compensation means compensation during the Plan Year or such other consecutive 12-month period over which compensation is otherwise determined under the Plan (the determination period). The cost-of-living adjustment in effect for a calendar year applies to annual compensation for the determination period that begins with or within such calendar year. If compensation for a period of less than 12 months is used for a plan year, then the otherwise applicable compensation limit is reduced in the same proportion as the reduction in the 12-month period. If a determination period consists of fewer than 12 months, the annual compensation limit will be multiplied by a fraction, the numerator of which is the number of months in the determination period, and the denominator of which is 12.

If Compensation for any prior determination period is taken into account in determining an Employee's benefits accruing in the current Plan Year, the Compensation for that prior determination period is subject to applicable annual compensation limit in effect for that prior determination period.

For limitation years beginning on and after January 1, 2001, for purposes of applying the limitations described in this Subsection 2.1(m), Compensation paid or made available during such limitation years shall include elective amounts that are not includible in the gross income of the Employee by reason of Section 132(f)(4) of the Code.

(n) Deductible Participant Contribution: Prior to January 1, 1987, the amount a Participant may voluntarily contribute to the Plan which could not exceed the lesser of $2,000 (or such higher limit as allowed by the Code), or 100% of Compensation, and is deductible from gross income by the Participant pursuant to the Code. No Deductible Participant Contributions may be made after January 1, 1987.

(o) Deferred Compensation Contributions: A Participant's contributions described in Section 4.8 herein and credited to his Participant Deferred Compensation Contribution Account.

(p) Disability: A physical or mental condition which, in the judgment of the Committee, totally and presumably permanently prevents a Participant from engaging in any substantial gainful employment with the Employer. A determination of such disability shall be based upon competent medical evidence.

(q) Effective Date: The later of: (a) the date specified in the Joinder Agreement; or (b) the first day on which the Plan has a Participant.

(r) Employee: Shall have the meaning set forth in Section 2 of the Joinder Agreement.

(s) Employer: A Municipality chartered, incorporated or formed under the laws of the State of Oklahoma which executes the Joinder Agreement.

(t) Employment Commencement Date: The first day of the first pay period during which the Participant receives wages as defined in Section 3121(a) of the Code from the Employer.

(u) Entry Date: The date an Employee becomes a Participant.

(v) Forfeiture: The portion of a Participant's Accounts which becomes forfeitable pursuant to Section 6.6 hereof.

(w) Fund: The fund established to provide the benefits under the Plan for the exclusive benefit of the Participants included in the Plan, and which will be pooled with similar funds of other incorporated cities and towns of Oklahoma as a part of the Oklahoma Municipal Retirement Fund, for purposes of pooled management and investment.

(x) Investment Manager: A person who is either (i) registered as an investment adviser under the Investment Advisers Act of 1940, (ii) a bank, as defined in the Investment Advisers Act of 1940, or (iii) an insurance company qualified to perform investment management services under the laws of more than one state.

(y) Investment Options: Any of those investment options selected by the Committee in accordance with Section 5.12 hereof.

(z) Joinder Agreement: The agreement by which the Employer adopts this Plan and Fund as its Plan and Fund.

(aa) Leased Employee: Any person (other than an employee of the recipient) who pursuant to an agreement between the recipient and any other person ("leasing organization") has performed services for the recipient (or for the recipient and related persons determined in accordance with Section 414(n)(6) of the Code) on a substantially full time basis for a period of at least one year, and such services are performed under primary direction or control by the recipient. Contributions or benefits provided a Leased Employee by the leasing organization which are attributable to services performed for the recipient employer shall be treated as provided by the recipient employer.

A Leased Employee shall not be considered an employee of the recipient if: (I) such employee is covered by a money purchase pension plan providing: (1) a nonintegrated employer contribution rate of at least 10% of compensation, as defined in Section 415(c)(3) of the Code, but including amounts contributed pursuant to a salary reduction agreement which are excludable from the employee's gross income under Section 125, Section 402(e)(3), Section 402(h)(1)(B) or Section 403(b) of the Code, (2) immediate participation, and (3) full and immediate vesting; and (ii) leased employees do not constitute more than 20% of the recipient's nonhighly compensated work force.

(bb) Limitation Year: The twelve (12) consecutive month period ending on June 30th of each year. If the Limitation Year is amended to a different twelve (12) consecutive month period, the new Limitation Year must begin on a date within the Limitation Year in which the amendment is made.

(cc) Loan Account: A Participant's Separate Account established in the event he desires to make a loan from his applicable Account as provided in Section 6.13 herein.

(dd) Mandatory Contributions: Contributions, if elected by the Employer in the Joinder Agreement, which Participants are required to make in order to participate in the Plan.

(ee) Municipality: (1) each and every incorporated municipality in the State of Oklahoma; (2) public trusts having municipalities as a beneficiaries; (3) interlocal cooperatives created pursuant to 74 Oklahoma Statutes, Sections 1001, et seq., between municipalities and/or their public trust, and; (4) any other legal entity comprising a municipal authority as that term is used in Chapter 48 of Title 11 Oklahoma statutes, which has adopted the Plan and/or which has become a participant in the related trust according to the terms herein.

(ff) Municipality Contribution Account: The account maintained for a Participant in which his share of the contributions of the Employer and the Amounts Forfeited and any adjustments relating thereto are recorded.

(gg) Normal Retirement Date: The first day of the month occurring on or next following the date a Participant attains sixty-five (65) years of age.

(hh) Oklahoma Municipal Retirement Fund: The trust created in accordance with Sections 48-101 et seq., of Title 11, Oklahoma Statutes 1981, to combine pension and retirement funds in incorporated cities and towns of Oklahoma for purposes of management and investment, represented by and acting through its Board of Trustees.

(ii) Participant: Any Employee or former Employee who meets the eligibility requirements and is covered under the Plan.

(jj) Participant Contribution Accounts: All of the following Accounts: (i) Participant Deductible Contribution Account, (ii) Participant Deferred Compensation Contribution Account, (iii) Participant Nondeductible Contribution Account, (iv) Catch-Up Contribution Account, (v) Pick-Up Contributions Account, (vi) Participant Mandatory Contributions Account, (vii) Participant Rollover Account, and (viii) Participant Roth Contribution Account.

(kk) Participant Deductible Contribution Account: The Account maintained for a Participant in which his Deductible Participant Contributions and adjustments relating thereto are recorded.

(ll) Participant Deferred Compensation Contribution Account: The Account maintained for a Participant in which his Deferred Compensation Contributions resulting from the Participant's election under Section 4.8 of the Plan and adjustments thereto are recorded.

(mm) Participant Mandatory Contribution Account: The Account maintained for a Participant in which his Mandatory Contributions and adjustments relating thereto are recorded.

(nn) Participant Nondeductible Contribution Account: The Account maintained for a Participant in which his voluntary nondeductible contributions and adjustments relating thereto are recorded.

(oo) Participant Rollover Account: The Account maintained for a Participant in which any Rollover Contributions are recorded.

(pp) Participant Roth Contribution Account: The Account maintained for a Participant in which any Roth Contributions are recorded.

(qq) Participation: The period commencing as of the date an Employee became a Participant and ending on the date the final distributions of all the Account balances are made.

(rr) Period(s) of Service or Service:

(1) A Participant's last continuous period during which the Participant was an Employee of the Employer and/or any other Municipality prior to the earlier of his Retirement or Break in Service.

(i) Service includes employment with a Municipality other than the Employer prior to the time that the other Municipality adopted the Plan if the other Municipality credits a participant's past service under its retirement plan; and

(ii) Service for the Employer does not include employment with any Municipality if that service would not be included under the Municipality's Plan.

(2) Concurrent employment with more than one Municipality shall be credited as only one period of service.

(3) Any Authorized Leave of Absence shall not be considered as interrupting continuity of employment, provided the Employee returns within the period of authorized absence. Until such time as the City Council shall adopt rules to the contrary, credit for Service with the Employer shall be granted for any period of Authorized Leave of Absence during which the Employee's full Compensation is continued and contributions to the Fund are continued at the same rate and made by or for him, but credit for Service with the Employer shall not be granted for any period of authorized, nonpaid absence due to illness, union leave, military service, or any other reason, unless arrangements are made with the City Council for the Employee's continued participation and for contributions to be continued at the same rate and made by him or on his behalf during such absence. Provided, however, if a Participant is on an Authorized Leave of Absence and is receiving worker's compensation during such Authorized Leave of Absence, and if the Employer so elects in the Joinder Agreement, such Participant shall be credited with Service for such period for purposes of vesting only (and not for purposes of allocation of Employer Contributions).

(4) The expiration of the term of office of an elected official shall not be considered as interrupting continuity of employment, provided the official is re-elected for a consecutive term.

(5) Any reference in this Plan to the number of years of Service of a Participant shall include fractional portions of a year.

(6) With respect to a Participant who was previously 100% vested in any other Municipality's qualified retirement plan prior to becoming a Participant in this Plan, such Participant's "Service" for purposes of determining years of service for vesting under this Plan shall include the Participant's last continuous period during which the Participant was an employee of the other Municipality.

(ss) Pick-Up Contributions: The Employer's contributions described in Section 4.7 hereof and credited to his Pick-Up Contribution Account.

(tt) Pick-Up Contributions Account: The account maintained for a Participant in which his share of Pick-Up Contributions are recorded.

(uu) Plan: The Oklahoma Municipal Retirement Fund Master Defined Contribution Plan set forth herein, and all subsequent amendments.

(vv) Plan Administrator: The persons who administer the Plan pursuant to the provisions of Article X hereof.

(ww) Plan Year: Means the twelve (12) consecutive month period ending June 30th of each year. The initial or final Plan Year may be less than a twelve (12) consecutive month period.

(xx) Previous Plan: The terms and provisions in the prior instruments governing the Employer's qualified defined contribution retirement plan and related trust, and applying before the Effective Date hereof, or any other date expressly specified herein if different from the Effective Date, which prior instruments are amended, restated and superseded by this instrument.

(yy) Retirement: Termination of employment upon a Participant's attaining age 65.

(zz) Roth Contributions: A Participant's contributions described in Section 4.8(d) herein and credited to his Participant Roth Contribution Account.

(aaa) Trust Service Provider: The person appointed by the Trustee to supervise operation of the Oklahoma Municipal Retirement Fund and to assist participating Municipalities in the adoption and operation of the Plan.

(bbb) Trustee: The Trustees appointed pursuant to the Trust Indenture establishing the Oklahoma Municipal Retirement Fund.

(ccc) Valuation Date: The date specified in Section 13 of the Joinder Agreement and any Special Valuation Dates determined in accordance with Section 5.10.

(ddd) Valuation Period: The period of time between two successive Valuation Dates.

2.2 **Construction**: The masculine gender, where appearing in the Plan, shall be deemed to include the feminine gender, unless the context clearly indicates to the contrary. The words "hereof," "herein," "hereunder" and other similar compounds of the word "herein" shall mean and refer to the entire Plan, not to any particular provision or section.

ARTICLE III.
Eligibility and Participation

3.1 **Eligibility**: An Employee, as defined in the Joinder Agreement, who has satisfied all the requirements set forth in the Joinder Agreement shall be eligible to participate in the Plan. Any person who has been classified by the Employer as an independent contractor and has had his compensation reported to the Internal Revenue Service on Form 1099 but who has been reclassified as an "employee" (other than by the Employer) shall not be considered as an eligible Employee who can participate under this Plan; provided, if the Employer does reclassify such worker as an "Employee," for purposes of this Plan, such reclassification shall only be prospective from the date that the Employee is notified by the Employer of such reclassification.

3.2 **Entry Date**: The participation of an Employee eligible to become a Participant shall commence on the earliest date permitted by the Employer in the Joinder Agreement.

3.3 **Re-employment of Former Participants**: Subject to Section 3.4, if a Participant incurs a Break in Service and is subsequently re-employed by the Employer, the Participant shall not receive any credit for his previous Period of Service with the Employer and such Participant shall be treated in the same manner as a person who has not previously been employed by any Municipality.

3.4 **Re-employment of Retired or Fully Vested Participants**: If a retired or fully vested Participant is re-employed by the Employer, no distributions shall be made from the Plan during the period of such re-employment. Periods of Service prior to such Participant's retirement or termination of service, as applicable, shall count as Periods of Service for purposes of determining such Participant's vested interest in his Municipality Contribution Account.

ARTICLE IV.
Contributions

4.1 **Contributions by Employer**: The Employer shall make such contributions as set forth in the Joinder Agreement. Such contributions shall be made from the operating revenue of the current taxable year or from accumulated revenue or surplus, as appropriate. The contribution shall be determined by written action of the Employer stating the amount of such contribution, and by the payment of such stated amount to the Trustee monthly. Upon execution of the Joinder Agreement, the Employer will contribute one Dollar ($1.00) to establish the Fund. Any Participant who received Compensation from the Employer during the Valuation Period shall share in the Employer's contribution for the Valuation Period, even if not employed on the last day of the Valuation Period.

All Participant contributions shall be transmitted monthly to the Trustee after being withheld by the Employer. The Trustee shall hold all such contributions, subject to the provisions of the Plan and Fund, and no part of these contributions shall be used for, or diverted to, any other purpose.

4.2 **Required Participant Contributions**: If the Employer so elects in the Joinder Agreement, Participants shall not be required to contribute to the Plan.

4.3 **Mandatory Contributions**: If the Employer so elects in the Joinder Agreement, a Participant shall contribute to the Plan for each Plan Year the percentage of his Compensation set forth in the Joinder Agreement. Mandatory Contributions shall be made by payroll deductions. The Participant shall authorize such deductions in writing on forms approved by, and filed with, the Committee.

4.4 **Voluntary Nondeductible Contributions by Participants**: Subject to the limitations of Sections 5.11 and to such rules of uniform application as the Committee may adopt, each Participant may elect to make nondeductible contributions to the Plan. The contributions of such Participant after the Effective Date may be by payroll deduction, which the Participant shall authorize the Employer to make on written authorization forms designated by and filed with the Committee, or by cash payments by such Participant to the Trustee. The authorization to make contributions by payroll deductions shall be effective on the first day following the Committee's receipt of the payroll deduction authorization. In addition, a Participant may make Rollover Contributions notwithstanding the percentage limitations in the first sentence of this Section or the cash payment requirement of the second sentence of this Section.

4.5 **Change of Rate of Voluntary Nondeductible Contributions by Participant**: The Participant may change his rate of payroll deduction at any time, or he may discontinue his payroll deductions at any time. Any change of rate or discontinuance of payroll deductions shall be effective on the first payday following the receipt of written notice thereof by the Committee; provided, however, that not more than one change or discontinuance shall be made within a calendar month unless otherwise stated by the Committee.

The Participant must furnish the Committee at the time of any Participant Contribution or payroll deduction authorization an election designating the contribution as a Mandatory Contribution, Deductible Participant Contribution, or a Voluntary Nondeductible Contribution.

4.6 **Participant Contributions Nonforfeitable**: Each Participant who contributes hereunder shall have a nonforfeitable vested interest in that portion of the value of his own contributions not theretofore previously withdrawn by him.

4.7 **Pick-Up Contributions**: If the Employer elects in Section 5 of the Joinder Agreement, all Participants shall be required as a condition of employment to make the contributions specified in the Joinder Agreement. These contributions shall be picked up and assumed by the Employer and paid to the Fund in lieu of contributions by the Participant. Such contributions shall be designated as Employer contributions for federal income tax purposes. Each Participant's Compensation will be reduced by the amount paid to the Fund by the Employer in lieu of the required contribution by the Participant. These contributions shall be excluded from the Participant's gross income for federal income tax purposes and from wages for purposes of withholding under Sections 3401 through 3404 of the Code in the taxable year in which contributed. No Participant shall have the option of receiving the contributed amounts directly as Compensation. Contributions made by the Employer under this election shall be designated as Participant contributions for purposes of vesting, determining Participant rights and Participant Compensation. [In order for the Employer to have reliance on whether the Pick-Up Contributions comply with Section 414(h)(2) of the Code, the Employer must obtain a private letter ruling from the Internal Revenue Service.]

4.8 **Deferred Compensation Contributions**: If the Employer elects in the Joinder Agreement and if such Employer adopted a cash or deferred feature before May 7, 1986, the following provisions shall apply:

(a) Deferred Compensation Contributions under Code Section 401(k): A Participant, by written notice to the Plan Administrator, may elect to make a Deferred Compensation Contribution to the Plan rather than receive Compensation to which the Participant would otherwise be entitled during the period immediately following such election.

Subject to the limitations of this Section 4.8 and Section 5.11, a Participant's Deferred Compensation Contribution may be any whole percentage of his Compensation, but in no case shall a Participant's Deferred Compensation Contribution election exceed the percentage set forth in the Joinder Agreement. Such election shall be binding until the Participant, by written notice to the Plan Administrator, modifies or discontinues his Deferred Compensation Contribution. A Participant's initial election, or modification or discontinuance shall be effective as soon as administratively practicable following the Plan Administrator's receipt of the Participant's written notice of election, modification or discontinuance, and shall remain in effect until modified or terminated. Provided, not more than one change or discontinuance shall be made within a calendar month unless otherwise stated by the Committee.

Employer contributions made pursuant to this Section 4.8 shall be credited to the Participant's Participant Deferred Compensation Account. All such Employer contributions shall

be paid to the Trustee as soon as practicable following the retention of such amounts by the Employer from the Participant's Compensation.

(b) Dollar Limitation on Deferred Compensation Contributions:

(i) General Rule. No Participant shall be permitted to make Deferred Compensation Contributions during any calendar year in excess of the dollar limitation contained in Section 402(g) of the Code (including, if applicable, the dollar limitation on Catch-Up Contributions defined in Section 414(v) of the Code) in effect as of the beginning of the taxable year as adjusted under Section 402(g)(4) of the Code (hereafter referred to as "Excess Elective Deferrals"). In the case of a Participant who is age 50 or over by the end of the taxable year, the dollar limitation described in the preceding sentence includes the amount of Deferred Compensation Contributions that can be Catch-Up Contributions. In the event a Catch-Up Contribution eligible Participant makes Excess Elective Deferrals, the Plan Administrator shall cause such Participant's Deferred Compensation Contributions to be recharacterized as Catch-Up Contributions to the extent necessary to either (i) exhaust his Excess Elective Deferrals, and/or (ii) increase his Catch-Up Contributions to the applicable limit under Section 414(v) of the Code for the Plan Year.

(ii) Recharacterization to Meet Limits of Section 402(g) of the Code. In the event a Participant's Deferred Compensation Contributions for a Plan Year do not equal the maximum Contributions that may be made under the Plan during that Plan Year for any reason, the Participant's Catch-Up Contributions for such Plan Year shall be recharacterized as Deferred Compensation Contributions for all purposes to the extent necessary to increase his Deferred Compensation Contributions to equal such maximum for such Plan Year.

(iii) Corrective Distributions.

a. **General**. Notwithstanding any other provision of the Plan to the contrary, Excess Elective Deferrals (remaining after recharacterization as discussed above) and income and loss allocable thereto for the applicable calendar year must be distributed no later than April 15 following the calendar year in which Excess Elective Deferrals are incurred to avoid penalty, to Participants who have Excess Elective Deferrals for the preceding calendar year. Provided that, Excess Elective Deferrals to be distributed for a taxable year will be reduced by Excess Contributions previously distributed for the Plan Year beginning in such taxable year. For years beginning after 2005, distribution of Excess Elective Deferrals for a year shall be made first from the Participant's Account holding Deferred Compensation Contributions, to the extent Deferred Compensation Contributions were made for the year, unless the Participant specifies otherwise.

b. **Calculation of Income Allocable to Excess Elective Deferrals**. The Plan Administrator shall use the method provided in Section 5.6 herein for computing the income allocable to corrective distributions pursuant to this Section. Excess Elective Deferrals are determined on a date that is no more than seven (7) days before the distribution. For the Plan Year beginning in 2007, income or loss allocable to the period between the end of the taxable year and the

date of distribution ("gap period") must be taken into account for corrective distributions. For Plan Years beginning after 2007, income or loss applicable to the gap will not be taken into account for corrective distributions.

(c) Catch-up Contributions: For Plan Years beginning after December 31, 2001, all Employees who are eligible to make Deferred Compensation Contributions under this Plan and who have attained age 50 before the close of the Employee's taxable year shall be eligible to make Catch-Up Contributions in accordance with, and subject to the limitations of, Section 414(v) of the Code. Catch-Up Contributions are Deferred Compensation Contributions made to the Plan that are in excess of an otherwise applicable Plan limit and that are made by Participants who are age 50 or over by the end of their taxable years. An otherwise applicable Plan limit is a limit in the Plan that applies to Deferred Compensation Contributions without regard to Catch-Up Contributions, such as the limit on Annual Additions and the Code Section 402(g) limit. Such Catch-Up Contributions shall not be taken into account for purposes of the provisions of the Plan implementing the required limitations of Sections 402(g) and 415 of the Code. The Plan shall not be treated as failing to satisfy the provisions of the Plan implementing the requirements of Section 401(k)(3), 401(k)(11), 401(k)(12), 410(b), or 416 of the Code, as applicable, by reason of the making of such Catch-Up Contributions.

(d) Roth Elective Deferrals:

(i) General Application.

(1) If elected by the Employer in the Joinder Agreement, this Subsection (d) will apply to Contributions beginning with the effective date specified in the adoption agreement but in no event before the first day of the first taxable year beginning on or after January 1, 2006.

(2) As of the effective date under Subsection (1), the Plan will accept Roth elective deferrals made on behalf of Participants. A Participant's Roth elective deferrals will be allocated to a separate account maintained for such deferrals as described in Subsection (ii).

(3) Unless specifically stated otherwise, Roth elective deferrals will be treated as elective deferrals for all purposes under the Plan. Roth elective deferrals that are determined to be excess elective deferrals shall be corrected by distribution in the manner set forth in Section 4.8.

(ii) Separate Accounting.

(1) Contributions and withdrawals of Roth elective deferrals will be credited and debited to the Roth elective deferral account maintained for each Participant.

(2) The Plan will maintain a record of the amount of Roth elective deferrals in each Participant's account.

(3) Gains, losses, and other credits or charges must be separately allocated on a reasonable and consistent basis to each Participant's Roth elective deferral account and the Participant's other accounts under the Plan.

(4) No contributions other than Roth elective deferrals and properly attributable earnings will be credited to each Participant's Roth elective deferral account.

(iii) Direct Rollovers.

(1) Notwithstanding Section 9.5, a direct rollover of a distribution from a Roth elective deferral account under the Plan will only be made to another Roth elective deferral account under an applicable retirement plan described in § 402A(e)(1) or to a Roth IRA described in Code Section 408A, and only to the extent the rollover is permitted under the rules of Code Section 402(c).

(2) Notwithstanding Section 9.5, if elected by the Employer in the Joinder Agreement, the Plan will accept a rollover contribution to a Roth elective deferral account only if it is a direct rollover from another Roth elective deferral account under an applicable retirement plan described in Code Section 402A(e)(1) and only to the extent the rollover is permitted under the rules of Code Section 402(c).

(3) The Plan will not provide for a direct rollover (including an automatic rollover) for distributions from a Participant's Roth elective deferral account if the amount of the distributions that are eligible rollover distributions are reasonably expected to total less than $200 during a year. In addition, any distribution from a Participant's Roth elective deferral account is not taken into account in determining whether distributions from a Participant's other accounts are reasonably expected to total less than $200 during a year. However, eligible rollover distributions from a Participant's Roth elective deferral account are taken into account in determining whether the total amount of the Participant's account balances under the Plan exceeds $1,000 for purposes of mandatory distributions from the plan.

(iv) Definition.

(1) **Roth Elective Deferrals**. A Roth elective deferral is an elective deferral that is:

a. Designated irrevocably by the Participant at the time of the cash or deferred election as a Roth elective deferral that is being made in lieu of all or a portion of the pre-tax elective deferrals the Participant is otherwise eligible to make under the plan; and

b. Treated by the Employer as includible in the Participant's income at the time the Participant would have received that amount in cash if the Participant had not made a cash or deferred election.

ARTICLE V.
Accounting, Allocation and Valuation

5.1 **Accounts**: The Committee shall maintain a separate Municipality Contribution Account, Participant Nondeductible Contribution Account, Participant Mandatory Contribution Account, Participant Deductible Contribution Account, Participant Rollover Account, Participant Deferred Compensation Contribution Account, Catch-Up Contribution Account, Pick-Up Contributions Account and Loan Account as necessary for each Participant. A separate sub-account for each such Account shall be maintained for each Investment Option offered in accordance with Section 5.12. All such Accounts shall be credited or debited as herein provided.

5.2 **Eligibility for Allocation**: Employer contributions together with Amounts Forfeited as of the Valuation Date shall be allocated to the Municipality Contribution Accounts of Participants.

5.3 **Allocation of Contribution**: The Employer contributions, together with Amounts Forfeited as of the prior Valuation Date shall be allocated in the manner elected by the Employer in the Joinder Agreement.

5.4 **Allocation of Amounts Forfeited**: No Amount Forfeited attributable to the contribution of one Employer adopting this Plan may be allocated for the benefit of Participants of the Plan of any other adopting Employer.

5.5 **Value of Account**: The value of a Participant's Account is equal to the sum of all contributions, earnings or losses, and other additions credited to the Account, less all distributions (including distributions to Beneficiaries and to alternate payees and also including disbursement of Plan loan proceeds), forfeitures, expenses and other charges against the Account as of a Valuation Date or other relevant date. For purposes of a distribution under the Plan, the value of a Participant's Account balance is its value as of the Valuation Date immediately preceding the date of the distribution. The value of a Participant's Account is the fair market value of the assets in the account.

5.6 **Allocation of Investment Earnings and Losses**: As of each Valuation Date, the Accounts will be adjusted to reflect the earnings and losses since the last Valuation Date. Earnings or losses will be allocated using the daily valuation method so that earnings or losses will be allocated on each day of the Plan Year for which Plan assets are valued on an established market.

5.7 **Accounting for Participants' Contributions**: Contributions by or on behalf of each Participant shall be credited to his Participant Nondeductible Contribution Account, Participant Mandatory Contribution Account, Participant Deductible Contribution Account, Catch-Up Contribution Account, Pick-Up Contribution Account, or Participant Deferred Compensation Contribution Account as deposited with the Trustee.

5.8 **Accounting for Statement of Account**: As soon as is administratively feasible, the Committee shall present to each Participant a statement of such Participant's Accounts, at least annually, showing the balances at the beginning of the reported period, any changes during the reported period, the balances at the end of the reported period, and such other information as the Committee may determine. However, neither the maintenance of accounts, the allocations to

Accounts, nor the statements of account shall operate to vest in any Participant any right or interest in or to the Fund except as the Plan specifically provides herein.

5.9 **Time of Adjustment**: Each adjustment required by this Article V shall be deemed to have been made at the times specified in this Article V, regardless of the dates of actual entries or receipts by the Trustee of contributions for such Plan Year.

5.10 **Special Valuation Date**: If the Committee determines that a substantial change in the value of any Investment Fund has occurred since the last Valuation Date, the Committee may, prior to the next Valuation Date, establish one or more Special Valuation Dates and determine the adjustment required to make the total net credit balance in the Accounts of the then Participants equal to the then market value of the total assets of the Fund. Such adjustments shall be made consistent with the procedure specified in Section 5.5. Having determined such adjustment, all distributions which are to be made as of or after such special Valuation Date, but prior to the next succeeding Valuation Date or Special Valuation Date, shall be made as if the net credit balances in all Accounts had actually been credited or debited to reflect the adjustment provided by this Section.

5.11 **Limitation on Allocation of Employer Contributions**: The following provisions will be applicable in determining if the Plan and the Employer contributions thereto satisfy the requirements of Section 415 of the Code and the regulations thereunder. Except to the extent permitted under Section 4.8(c) of this Plan and Section 414(v) of the Code, if applicable, the Annual Additions that may be contributed or allocated to a Participant's Accounts under the Plan for any limitation year shall not exceed the Maximum Permissible Amount.

(a) Definitions: For the purposes of this Section the following definitions shall be applicable:

(i) Annual Additions: For purposes of the Plan, "Annual Additions" shall mean the amount allocated to a Participant's Account during the Limitation Year that constitutes:

(1) Employer contributions,

(2) Employee Deferred Compensation Contributions or Roth Contributions (excluding excess deferrals that are distributed in accordance with Treas. Reg. § 1.402(g)-1(e)(2) or (3)),

(3) Forfeitures, and

(4) Amounts allocated to an individual medical account, as defined in Section 415(1)(2) of the Code, which is part of a pension or annuity plan maintained by the Employer are treated as annual additions to a defined contribution plan; and amounts derived from contribution plans or accrued after December 31, 1985, and taxable years ending after such date, which are attributable to post-retirement medical benefits, allocated to the separate account of a key employee, as defined in Section 419(A)(d)(3) of the Code, under a welfare benefit fund, as defined in Section 419(e) of the Code, maintained by the Employer are treated as annual addition to a defined contribution plan.

Annual additions for purposes of Code § 415 shall not include restorative payments. A restorative payment is a payment made to restore losses to a Plan resulting from actions by a fiduciary for which there is reasonable risk of liability for breach of a fiduciary duty under federal or state law, where participants who are similarly situated are treated similarly with respect to the payments. Generally, payments are restorative payments only if the payments are made in order to restore some or all of the Plan's losses due to an action (or a failure to act) that creates a reasonable risk of liability for such a breach of fiduciary duty (other than a breach of fiduciary duty arising from failure to remit contributions to the Plan). This includes payments to a plan made pursuant to a court-approved settlement, to restore losses to a qualified defined contribution plan on account of the breach of fiduciary duty (other than a breach of fiduciary duty arising from failure to remit contributions to the Plan). Payments made to the Plan to make up for losses due merely to market fluctuations and other payments that are not made on account of a reasonable risk of liability for breach of a fiduciary duty are not restorative payments and generally constitute contributions that are considered annual additions.

Annual additions for purposes of Code § 415 shall not include: (1) The direct transfer of a benefit or employee contributions from a qualified plan to this Plan; (2) rollover contributions (as described in Code §§ 401(a)(31), 402(c)(1), 403(a)(4), 403(b)(8), 408(d)(3), and 457(e)(16)); (3) repayments of loans made to a participant from the Plan; and (4) repayments of amounts described in Code § 411(a)(7)(B) (in accordance with Code § 411(a)(7)(C)) and Code § 411(a)(3)(D), as well as Employer restorations of benefits that are required pursuant to such repayments.

If, in addition to this Plan, the Participant is covered under another qualified plan which is a defined contribution plan maintained by the Employer, a welfare benefit fund, as defined in Section 419(e) of the Code maintained by the Employer, or an individual medical benefit account, as defined in Section 415(1)(2) of the Code maintained by the Employer, which provides for Annual Additions during any Limitation Year, then the Annual Additions which may be credited to a Participant's Account under this Plan for any such Limitation Year will not exceed the Maximum Permissible Amount reduced by the Annual Additions credited to a Participant's Account under the other plans and welfare benefit funds for the same Limitation Year. If the Annual Additions with respect to the Participant under other defined contribution plans and welfare benefit plans maintained by the Employer are less than the Maximum Permissible Amount and the Employer contribution that would otherwise be contributed or allocated to the Participant's Account under this Plan would cause the Annual Additions for the Limitation Year to exceed this limitation, the amount contributed or allocated will be reduced so that the Annual Additions under all such plans and funds for the Limitation Year will equal the Maximum Permissible Amount. If the Annual Additions with respect to the Participant under such other defined contribution plans and welfare benefit funds in the aggregate are equal to or greater than the Maximum Permissible amount, no excess amount will be contributed or allocated to a Participant's Account under this Plan for the Limitation Year.

(ii) Actual Compensation: The words "Actual Compensation" shall mean a Participant's wages, salaries, and fees for professional services and other amounts received without regard to whether or not an amount is paid in cash for personal services actually rendered in the course of employment with the Employer, to the extent that the amounts are includible in gross income (or to the extent amounts deferred at the election of the Employee

would be includible in gross income but for the rules of Sections 125, 132 (for limitation years beginning after December 31, 2001), 402(e)(3), 402(h)(1)(B), 402(k), or 457(b) of the Code). These amounts include, but are not limited to, commissions paid salesmen, compensation for services on the basis of a percentage of profits, commissions on insurance premiums, tips and bonuses, fringe benefits, and reimbursements or other expense allowances under a nonaccountable plan as described in Treas. Reg. §1.62-2(c)). For years beginning after December 31, 2008, (i) an individual receiving a differential wage payment, as defined by Code §3401(h)(2), is treated as an employee of the employer making the payment, (ii) the differential wage payment is treated as Actual Compensation, and (iii) the Plan is not treated as failing to meet the requirements of any provision described in Code §414(u)(1)(C) by reason of any contribution or benefit which is based on the differential wage payment.

For purposes of applying the limitations described in this Section 5.11 of the Plan, Compensation paid or made available during such limitation years shall include elective amounts that are not includable in the gross income of the Employee by reason of Code Section 132(f)(4).

Actual Compensation shall be adjusted, as set forth herein, for the following types of compensation paid after a Participant's severance from employment with the Employer maintaining the Plan (or any other entity that is treated as the Employer pursuant to Code § 414(b), (c), (m) or (o)). However, amounts described in Subsections (a) and (b) below may only be included in Actual Compensation to the extent such amounts are paid by the later of 2½ months after severance from employment or by the end of the limitation year that includes the date of such severance from employment. Any other payment of compensation paid after severance of employment that is not described in the following types of compensation is not considered Actual Compensation within the meaning of this Section, even if payment is made within the time period specified above.

(1) **Regular Pay:** Actual Compensation shall include regular pay after severance of employment if:

A. The payment is regular compensation for services during the Participant's regular working hours, or compensation for services outside the Participant's regular working hours (such as overtime or shift differential), commissions, bonuses, or other similar payments; and

B. The payment would have been paid to the Participant prior to a severance from employment if the Participant had continued in employment with the Employer.

(2) **Leave Cashouts and Deferred Compensation:** Leave cashouts shall not be included in Actual Compensation. In addition, deferred compensation shall be included in Actual Compensation.

(3) **Salary Continuation Payments for Disabled Participants:** Actual Compensation does not include compensation paid to a Participant who is permanently and totally disabled (as defined in Code § 22(e)(3)).

(iii) Excess Amount: The words "Excess Amount" shall mean the excess of the Participant's Annual Additions for the applicable Limitation Year over the Maximum Permissible Amount.

(iv) **Maximum Permissible Amount**: The words "Maximum Permissible Amount" shall mean for the applicable Limitation Year, the "maximum permissible amount" (except for Employee Catch-Up Contributions under Section 414(v) of the Code) which may be contributed or allocated to or made with respect to any Participant which amount shall be the lesser of:

(1) $56,000, as adjusted for cost-of-living under Code Section 415(d) the "Defined Contribution Dollar Limitation," or

(2) 100% of the Participant's Actual Compensation for the Limitation Year.

The compensation limitation referred to above shall not apply to: any contribution for medical benefits (within the meaning of Section 419A(f)(2) of the Code) after separation from service which is otherwise treated as an Annual Addition, or any amount otherwise treated as an Annual Addition under Section 415(1)(1) of the Code.

(b) Determination of Excess: If an excess amount was allocated to a Participant on an allocation date of this Plan which coincides with an allocation date of another plan, the excess amount attributed to this Plan will be the product of (1) the total excess amount allocated as of such date times (2) the ratio of (i) the Annual Additions allocated to the Participant for the Limitation Year as of such date under this Plan to (ii) the total Annual Additions allocated to the Participant for the Limitation Year as of such date under this and all other qualified plans which are defined contribution plans.

(c) Treatment of Excess: Notwithstanding any provision of the Plan to the contrary, if the annual additions (within the meaning of Code § 415) are exceeded for any participant, then the Plan may be able to correct such excess in accordance with the Employee Plans Compliance Resolution System (EPCRS) as set forth in Revenue Procedure 2018-52 or any superseding guidance, including, but not limited to, the preamble of the final § 415 regulations. However, EPCRS may not be available in all situations.

5.12 **Investment Options**:

(a) Self-Directed: If the Employer elects in the Joinder Agreement, each Participant in the Plan is hereby given the specific authority to direct the investment of all or any portion of his Accounts in one or more Investment Options provided under this Plan in accordance with the procedures established by the Committee. If a Participant does not designate an Investment Option for his Accounts, his Accounts will be invested in the age-based balanced fund or such other Investment Option as may be designated by the Trustees. For purposes of this Section, the Participants shall be exercising full investment control, discretion, authority and fiduciary responsibility as provided in this Plan of the investments in such Participants' applicable Accounts.

(b) Non-Self-Directed: If the Employer does not elect in the Joinder Agreement to allow self-directed investments, all Accounts will be invested in the Balanced Fund or such other Investment Option as may be designated by the Trustees.

ARTICLE VI.
Benefits

6.1 **Retirement or Disability:** If a Participant's employment with the Employer is terminated when he attains age sixty-five (65), or if a Participant's employment is terminated at an earlier age as the result of a Disability, he shall be entitled to receive the entire amount of his Municipality Contribution Account.

6.2 **Deferred Retirement:** If a Participant, with the consent of the Employer, shall continue in active employment following his Normal Retirement Date, he shall continue to participate under the Plan. Upon actual retirement, such Participant shall be entitled to receive the entire amount of his Municipality Contribution Account as of his actual retirement date.

6.3 **Death of a Participant:** Upon the death of a Participant, his Beneficiary shall be entitled to receive the entire amount of his Municipality Contribution Account and Participant Contribution Accounts as of the date of his death. In the case of a death occurring on or after January 1, 2007, if a Participant dies while performing qualified military service (as defined in Code § 414(u)), the survivors of the Participant are entitled to any additional benefits (other than benefit accruals relating to the period of qualified military service) provided under the Plan as if the Participant had resumed and then terminated employment on account of death.

6.4 **Termination for Other Reasons - Vested Percentage:** If a Participant's employment with the Employer is terminated before his Normal Retirement Date for any reason other than Disability or death, he shall be entitled to an amount equal to the vested percentage of his Municipality Contribution Account. Such vested percentage shall be determined as of the date of termination in accordance with the election of the Employer in the Joinder Agreement.

6.5 **Initial Distribution Date:** The date of initial distribution ("Initial Distribution Date") of a Participant whose employment is terminated and provided that the Participant requests a distribution, shall be as soon as practicable following his termination of employment and he shall be entitled to the vested percentage of his Accounts on such Initial Distribution Date payable in accordance with the provisions of Section 6.10. The portion of the Employer's contribution, the Amounts Forfeited or the periodic adjustment which is allocated to a Participant terminated for the reasons specified in Section 6.4 after such Initial Distribution Date shall be payable in accordance with the method utilized under Section 6.10 as soon as practicable.

6.6 **Determination of Amounts Forfeited:** Upon a distribution pursuant to Section 6.4 or if the Participant incurs a Break in Service, the forfeited percentage of a Participant's Municipality Contribution Account, if any, shall be deducted from the Participant's Account. Such Amounts Forfeited shall become available for allocation in accordance with Item 8 of the Joinder Agreement as of the end of the calendar quarter following the Valuation Period in which the terminated Participant forfeited such amounts.

6.7 **Participant Contribution Accounts:** A Participant shall be fully vested in his Participant Contribution Accounts at all times. A Participant's Contribution Account balances shall be paid to him in connection with the distribution to him of the vested portion of his

Municipality Contribution Account on or after his Initial Distribution Date. Such distributions shall be made in accordance with Section 6.10 and Section 6.8.

6.8 **Withdrawals from Participant's Contribution Accounts:** In accordance with the provisions hereof, a Participant may withdraw all or any part of his Participant Contribution accounts by filing a written application with the Administrator. Such withdrawal shall be effective no sooner than thirty (30) (unless waived by the Participant) but not later than ninety (90) days after the Participant's receipt from the Plan Administrator of a rollover notice required by Code Section 402(f). A Participant who withdraws all or part of his Participant Contribution Account balances shall not forfeit his proportionate share of net income, gains and profits, if any, for the Valuation Periods previously allocated to his Participant Contribution Accounts, nor any portion of his Municipality Contribution Account but the Participant's Contribution Accounts shall not share (to the extent of any withdrawals) in any net income for the Valuation Period in which the withdrawal occurs. For any distribution notice issued in Plan Years beginning after December 31, 2006, any reference to the 90-day maximum notice period prior to distribution in applying the notice requirements of Code §§402(f) (the rollover notice), or 411(a)(11) (Participant's consent to distribution) will become 180 days.

(a) Participant Deductible Contribution Account: If allowed in the Joinder Agreement, a Participant may withdraw all or any part of his Participant Deductible Contribution Account (but not to exceed the amount in his Participant Deductible Contribution Account at the time of withdrawal) by filing a written application with the Plan Administrator. Such withdrawal may be made no more often than once a year. If at the time of the withdrawal the Participant has not attained age 59½ or is not disabled, the Participant will be subject to a federal income tax penalty unless such withdrawal is rolled over to a qualified plan or individual retirement account within sixty (60) days of the date of distribution.

(b) Participant Nondeductible Contribution Account: A Participant may withdraw all or any part of his Participant Nondeductible Contribution Account by filing a written application with the Plan Administrator.

(c) Participant Deferred Compensation Contribution Account: Notwithstanding any other provision of this Plan, no amount in a Participant's Deferred Contribution Account may be distributed to a Participant earlier than such Participant's retirement, death, Disability, or severance from employment. The above distribution requirements shall be strictly interpreted by the Plan Administrator to conform with the requirements of Section 401(k) of the Code and future amendments or Internal Revenue Service interpretations thereof. If a Participant is allowed to withdraw from his Participant Deferred Compensation Contribution Account, the provisions of the first paragraph of this Section 6.8 shall apply to such withdrawals. Notwithstanding the foregoing, for purposes of Code §401(k)(2)(B)(i)(I), effective January 1, 2009, an individual is treated as having been severed from employment during any period the individual is performing service in the uniformed services described in Code §3401(h)(2)(A). If an individual elects to receive a distribution by reason of severance from employment, death or disability, the individual may not make an elective deferral or Employee contribution during the 6-month period beginning on the date of the distribution.

(d) Pick-up Contribution Account: Notwithstanding any other provision of this Plan, no amount in a Participant's Pick-Up Contribution Account may be distributed to a Participant earlier than such Participant's retirement, death, Disability, or separation from service. If a Participant is allowed to withdraw from his Pick-Up Contribution Account, the provisions of the first paragraph of this Section 6.8 shall apply.

6.9 **Withdrawals from Participant's Mandatory Contribution Account:** A Participant may not withdraw any portion of his Participant Mandatory Contribution Account prior to the termination of his employment. Such account balances will be paid at the same time and in the same manner as such Participant's Municipality Contribution Account.

6.10 **Methods of Distribution:** On and after each Participant's Initial Distribution Date, after all adjustments to his Accounts required as of such date shall have been made, distribution of his share shall be made to or for the benefit of the Participant or, in case of his death, to or for the benefit of his Beneficiary, by one of the following methods, as determined by the Committee:

(a) a lump sum distribution;

(b) an installment distribution consisting of approximately equal installments for a term not exceeding ten (10) years;

(c) an installment distribution consisting of approximately equal installments for a term not extending beyond the joint life expectancy (as calculated in accordance with Income Tax Regulation section 1.72-9) on the Initial Distribution Date of the Participant and his spouse;

(d) periodic distributions as designated by the Participant or Beneficiary; or

(e) purchase of an annuity.

Commencement of payments under the method of distribution selected shall be as of the initial Distribution Date of the Participant, provided that for administrative convenience, such commencement may be delayed as reasonably necessary but in no event for more than sixty (60) days after a reasonable time for all administrative calculations, allocations and accounting operations necessary to determine the amount of the distribution. The Committee, in its sole discretion, may accelerate the payment of any unpaid installments. If a former Participant receiving installment payments dies prior to the receipt by him of the full amount to be paid to him from his Participant Accounts, the remaining installments shall be paid to his Beneficiary. Under no circumstance may a method of payment be elected that would be expected to cause more than fifty percent (50%) of the present value of any series of payments to go to a person other than the Participant.

6.11 **Designation of Beneficiary:** Each Participant shall designate his Beneficiary on a form provided by the Committee and such designation may include primary and contingent Beneficiaries. If Participant designates more than one Beneficiary, each shall share equally unless the Participant specifies a different allocation. The designation may be changed at any time by filing a new form with the Committee. In the absence of such written designation, the surviving spouse, if any, of the Participant shall be deemed to be the designated Beneficiary, and otherwise the estate of such Participant. Further, the written designation of the Participant's spouse may be voided upon divorce of the Participant if required by applicable state law. In all events, the date of determination of a Participant's Beneficiary shall be the date of death of a

Participant. Production of a certified copy of the death certificate of any Participant or other persons shall be sufficient evidence of death, and the Committee shall be fully protected in relying thereon.

6.12 **Payments Under a Qualified Domestic Relations Order:**

(a) The Municipality shall follow the terms of any "Qualified Domestic Relations Order" as defined in Subsection (b) below issued with respect to a Participant where such Qualified Domestic Relations Order grants to an "Alternate Payee" rights in the benefit of the Participant.

(b) The term "Qualified Domestic Relations Order" means an order issued by the District Court of the State of Oklahoma pursuant to the domestic relations laws of the State of Oklahoma which relates to the provision of marital property rights to a spouse or former spouse of a Participant and which creates or recognizes the existence of an Alternate Payee's right to, or assigns to an Alternate Payee the right to receive a portion of the benefits payable with respect to a Participant of the Plan.

(c) To qualify as an Alternate Payee, a spouse or former spouse must have been married to the Participant for a period of not less than thirty (30) continuous months immediately preceding the commencement of the proceedings from which the Qualified Domestic Relations Order issues.

(d) A Qualified Domestic Relations Order is valid and binding on the Trustees and the Participant only if it meets the requirements of this Section.

(e) A Qualified Domestic Relations Order shall clearly specify:

1) the name, social security number, and last-known mailing address (if any) of the Participant, and the name and mailing address of the alternative payee covered by the order;

2) the amount or percentage of the Participant's benefits to be paid by the Plan to the Alternate Payee;

3) the characterization of the benefit as to marital property rights, and whether the benefit ceases upon the death or remarriage of the Alternate Payee; and,

4) each plan to which such order applies.

(f) A Qualified Domestic Relations Order meets the requirements of this Section only if such order:

1) does not require the Plan to provide any type or form of benefit, or any option not otherwise provided under the Plan;

2) does not require the Plan to provide increased benefits; and,

3) does not require the payment of benefits to an Alternate Payee which are required to be paid to another Alternate Payee pursuant to another order previously determined to be a Qualified Domestic Relations Order, or an order recognized by the Plan as a valid order prior to the effective date of the Plan.

(g) A Qualified Domestic Relations Order shall not require payment of benefits to an Alternate Payee prior to the actual retirement date or withdrawal of the related member.

(h) In the event a Qualified Domestic Relations Order requires the benefits payable to an Alternate Payee to terminate upon the remarriage of said Alternate Payee, the Plan shall terminate said benefit only upon the receipt of a certified copy of a marriage license, or a copy of a certified order issued by the Court that originally issued said Qualified Domestic Relations Order declaring the remarriage of said Alternate Payee.

(i) This Section of the Plan shall not be subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), 29 U.S.C.A. Section 1001, et seq., as amended from time to time, or rules and regulations promulgated thereunder, and court cases interpreting said Act.

(j) Effective on or after April 6, 2007, a domestic relations order that otherwise satisfies the requirements for a QDRO will not fail to be a QDRO: (i) solely because the order is issued after, or revises, another domestic relations order or QDRO; or (ii) solely because of the time at which the order is issued, including issuance after the annuity starting date.

(k) The Board of Trustees of the Oklahoma Municipal Retirement Fund shall promulgate such rules as are necessary to implement the provisions of this Section.

(l) An Alternate Payee who has acquired beneficiary rights pursuant to a valid Qualified Domestic Relations Order must fully comply with all provisions of the rules promulgated by the Trustees pursuant to this Section in order to continue receiving his or her benefits.

(m) Nothing in this Section shall grant a spouse or former spouse of a Participant any property rights in the benefits of any Participant except as specifically authorized for Qualified Domestic Relations Orders, and no spousal consent shall be required for a Participant to elect or change elections pertaining to a benefit payable under this Plan.

6.13 **Loans to Participants:**

(a) General: The Committee, in its sole discretion, may direct Trustees to make loans to Participants upon the written direction and application of the Participant who desires to effect such loan, up to 50% of the vested balance of a Participant's Accounts. All such loans (i) shall not be made available to Highly Compensated Employees (as defined in Section 414(q) of the Code) in an amount greater than the amount made available to other Employees, (ii) shall be available to all Participants on a nondiscriminatory basis, (iii) shall be made available in an amount equal to the lesser of 50% of the borrowing Participant's vested Benefit in his Account or $50,000, (iv) shall bear a reasonable rate of interest which will be established by the Committee, (v) shall be secured by the borrowing Participant's Benefit account balance attributable to his Account, (vi) shall be amortized and repaid in level payments of principal and

interest made not less frequently than monthly over the term of the loan, (vii) shall be repaid by payroll reduction while the Participant is employed; (viii) shall accelerate and be due in full on the date a Participant terminates employment with the Employer; (ix) shall not be less than $1,000 in amount each; and (x) shall be made upon such other reasonable terms which the Committee shall designate, such terms being applied in a nondiscriminatory fashion; provided, in no event shall any loan have a term in excess of five years. There shall not be more than one or two loans outstanding (as elected by the Employer) at any time with respect to a Participant. No Participant who has borrowed from the Plan may make another loan until the previous loan has been fully repaid. Outstanding loans are not subject to refinancing by a new loan. Upon direction by the Committee, and subject to Subsection (c) below, the Trustees may foreclose upon such Participant's interest in his Account in the event of default. A loan to a Participant, when added to the outstanding balance of all other loans to the Participant from the Plan and other plans sponsored by the Employer, cannot exceed $50,000, reduced by the excess of the highest outstanding balance of loans from the Plan (and all other plans sponsored by the Employer) during the one-year period ending on the day before the date the loan is made over the outstanding balance of the loans from the Plan on the date the loan is made. No distribution of a Benefit shall be made to any Participant, Beneficiary or the estate of a Participant unless and until all unpaid loans made by the Plan to such Participant together with accrued interest have been paid in full. In determining if any of the foregoing limitations regarding the making of loans to Participants, loans made under all other plans (i) sponsored by the Employer and (ii) qualified under Sections 401(a) and 501(a) of the Code will be considered. All costs and expenses of any loan will be charged to the applicable Accounts of the Participant.

(b) Establishment of Loan Account: At such time as it is determined that a Participant is to receive a loan from the Plan, the loan shall be made from the Participant's applicable Account in the order and precedence indicated hereafter and such amount shall be deemed to be credited to the Participant's Loan Account with a corresponding debit to occur to his Account: (i) first, an Account holding Employer contributions, including "rollover contributions" (other than Deferred Compensation Contributions, if applicable); (ii) second, an Account holding Deferred Compensation Contributions, if applicable; and (iii) third, an Account holding contributions picked up and assumed by the Employer pursuant to Section 4.7 of this Plan. All interest payments to be made pursuant to the terms and provisions of the loan shall be credited to the applicable Account in such a manner so that the Loan Account will reflect unpaid principal and interest from time to time. The earnings attributable to the Loan Account shall be allocable only to the Loan Account of such Participant and shall not be considered as general earnings of the Trust Fund to be allocated to the other Participants therein as provided herein. Other than for the limited purposes of establishing a separate account for the allocation of the interest thereto, a Participant's Loan Account shall, for all other purposes, be considered as part of his applicable Account.

(c) Foreclosure of Loan Account: The Trustees may foreclose upon such Participant's interest in his Account in the event of default under the loan made to the Participant under this Section.

(d) Special Restrictions on Foreclosure: In the event of default under a loan made under this Section, foreclosure under the promissory note evidencing such loan and attachment of the Participant's interest in his applicable Accounts shall occur within a reasonable time

following the event of default; provided, with respect to any portion of a loan secured by amounts governed under Section 401(k) of the Code, if applicable, foreclosure on such 401(k) amounts shall not occur until the occurrence of an event described under Section 401(k) of the Code which would otherwise permit a distribution to be made from the Plan.

(e) Establishment of Loan Program: The Trustees are hereby authorized and directed to establish a "loan program" (the "Loan Program") and the Trustees are further authorized to delegate to the Committee the duties and responsibilities with regard to the implementation of the Loan Program as adopted by the Trustees for and on behalf of the Plan. The Loan Program shall be considered to be a part of this Plan for the purposes stated in the Loan Program.

(f) Loan Account: The words "Loan Account" shall mean a Participant's separate Account established in the event he desires to make a loan from his applicable Account as provided in this Section 6.13.

6.14 **Required Minimum Distributions:** The provisions of this Section 6.14 will apply for purposes of determining Required Minimum Distributions for distribution calendar years beginning with the 2003 calendar year, as well as Required Minimum Distributions for the 2002 Distribution Calendar Years that are made on or after August 1, 2002. The requirements of this Section will take precedence over any inconsistent provisions of the Plan. All distributions required under this Section will be determined and made in accordance with the Treasury regulations under Section 401(a)(9) and the minimum distribution incidental benefit requirement of Section 401(a)(9)(G) of the Internal Revenue Code. Notwithstanding the other provisions of this Section, distributions may be made under a designation made before January 1, 1984, in accordance with Section 242(b)(2) of the Tax Equity and Fiscal Responsibility Act (TEFRA) and the provisions of the Plan that relate to Section 242(b)(2) of TEFRA.

(a) Limits on Distribution Periods: As of the first distribution calendar year, distributions, if not made in a single-sum, may only be made over one of the following periods (or a combination thereof): (1) the life of the participant; (2) the life of the participant and a designated beneficiary; (3) a period certain not extending beyond the life expectancy of the participant; or (4) a period certain not extending beyond the joint and last survivor expectancy of the participant and a designated beneficiary.

(b) Time and Manner of Distribution:

(i) Required Beginning Date. The Participant's entire interest will be distributed, or begin to be distributed, to the Participant no later than the Participant's Required Beginning Date. For purposes of this Section, the "Required Beginning Date" of a Participant is the April 1 of the calendar year following the later of the calendar year in which the Participant attains age 70½ or the calendar year in which the Participant retires.

(ii) Death of Participant Before Distributions Begin. If the Participant dies before distributions begin, the Participant's entire interest will be distributed, or begin to be distributed, no later than as follows:

(1) If the Participant's surviving spouse is the Participant's sole

designated Beneficiary, then, distributions to the surviving spouse will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died, or by December 31 of the calendar year in which the Participant would have attained age 70½, if later.

(2) If the Participant's surviving spouse is not the Participant's sole designated Beneficiary, then, distributions to the designated Beneficiary will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died.

(3) If there is no designated Beneficiary as of September 30 of the year following the year of the Participant's death, the Participant's entire interest will be distributed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(4) If the Participant's surviving spouse is the Participant's sole designated Beneficiary and the surviving spouse dies after the Participant but before distributions to the surviving spouse begin, this Subsection (ii), other than Subsection (ii)(1), will apply as if the surviving spouse were the Participant.

For purposes of this Subsection (ii) and Subsection (d), unless Subsection (ii)(1) applies, distributions are considered to begin on the Participant's Required Beginning Date. If Subsection (ii)(1) applies, distributions are considered to begin on the date distributions are required to begin to the surviving spouse under Subsection (ii)(4). If distributions under an annuity purchased from an insurance company irrevocably commence to the Participant before the Participant's Required Beginning Date (or to the Participant's surviving spouse before the date distributions are required to begin to the surviving spouse under Subsection (ii)(4)), the date distributions are considered to begin is the date distributions actually commence.

(iii) Forms of Distribution. Unless the Participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the Required Beginning Date, as of the first distribution calendar year distributions will be made in accordance with Subsections (c) and (d) of this Section. If the Participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder will be made in accordance with the requirements of Section 401(a)(9) of the Code and the Treasury regulations.

(c) Required Minimum Distributions During Participant's Lifetime:

(i) Amount of Required Minimum Distribution For Each Distribution Calendar Year. During the Participant's lifetime, the minimum amount that will be distributed for each distribution calendar year is the lesser of:

(1) the quotient obtained by dividing the Participant's Account balance by the distribution period in the Uniform Lifetime Table set forth in Section 1.401(a)(9)-9, Q&A-2, of the Treasury regulations, using the Participant's age as of the Participant's birthday in the distribution calendar year; or

(2) if the Participant's sole designated Beneficiary for the distribution calendar year is the Participant's spouse, the quotient obtained by dividing the Participant's Account balance by the number in the Joint and Last Survivor Table set forth in Section

1.401(a)(9)-9, Q&A-3, of the Treasury regulations, using the Participant's and spouse's attained ages as of the Participant's and spouse's birthdays in the distribution calendar year.

(ii) Lifetime Required Minimum Distributions Continue Through Year of Participant's Death. Required minimum distributions will be determined under this Subsection (c) beginning with the first distribution calendar year and up to and including the distribution calendar year that includes the Participant's date of death.

(d) Required Minimum Distributions After Participant's Death:

(i) Death On or After Date Distributions Begin.

(1) Participant Survived by Designated Beneficiary. If the Participant dies on or after the date distributions begin and there is a designated Beneficiary, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's Account balance by the longer of the remaining life expectancy of the Participant or the remaining life expectancy of the Participant's designated Beneficiary, determined as follows:

a. The Participant's remaining life expectancy is calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.

b. If the Participant's surviving spouse is the Participant's sole designated Beneficiary, the remaining life expectancy of the surviving spouse is calculated for each distribution calendar year after the year of the Participant's death using the surviving spouse's age as of the spouse's birthday in that year. For distribution calendar years after the year of the surviving spouse's death, the remaining life expectancy of the surviving spouse is calculated using the age of the surviving spouse as of the spouse's birthday in the calendar year of the spouse's death, reduced by one for each subsequent calendar year.

c. If the Participant's surviving spouse is not the Participant's sole designated Beneficiary, the designated Beneficiary's remaining life expectancy is calculated using the age of the Beneficiary in the year following the year of the Participant's death, reduced by one for each subsequent year.

(2) No Designated Beneficiary. If the Participant dies on or after the date distributions begin and there is no designated Beneficiary as of September 30 of the year after the year of the Participant's death, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's Account balance by the Participant's remaining life expectancy calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.

(ii) Death Before Date Distributions Begin.

(1) Participant Survived by Designated Beneficiary. If the Participant dies before the date distributions begin and there is a designated Beneficiary, the minimum amount that will be distributed for each distribution calendar year after the year of the

Participant's death is the quotient obtained by dividing the Participant's Account balance by the remaining life expectancy of the Participant's designated Beneficiary, determined as provided in Subsection (i).

(2) **No Designated Beneficiary**. If the Participant dies before the date distributions begin and there is no designated Beneficiary as of September 30 of the year following the year of the Participant's death, distribution of the Participant's entire interest will be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(3) **Death of Surviving Spouse Before Distributions to Surviving Spouse Are Required to Begin**. If the Participant dies before the date distributions begin, the Participant's surviving spouse is the Participant's sole designated Beneficiary, and the surviving spouse dies before distributions are required to begin to the surviving spouse under Subsection (b)(ii)(1), this Section 6.14(ii) will apply as if the surviving spouse were the Participant.

(e) Definitions:

(i) **Designated Beneficiary**. The individual who is designated as the Beneficiary under Section 6.11 of the Plan and is the designated Beneficiary under Section 401(a)(9) of the Internal Revenue Code and Section 1.401(a)(9)-4 of the Treasury regulations.

(ii) **Distribution Calendar Year**. A Calendar Year for which a minimum distribution is required. For distributions beginning before the Participant's death, the first Distribution Calendar Year is the calendar year immediately preceding the Calendar Year which contains the Participant's Required Beginning Date. For distributions beginning after the Participant's death, the first Distribution Calendar Year is the calendar year in which distributions are required to begin under Subsection (b)(ii). The Required Minimum Distribution for the Participant's first Distribution Calendar Year will be made on or before the Participant's Required Beginning Date. The Required Minimum Distribution for other Distribution Calendar Years, including the Required Minimum Distribution for the Distribution Calendar Year in which the Participant's Required Beginning Date occurs, will be made on or before December 31 of that distribution calendar year.

(iii) **Life Expectancy**. Life Expectancy as computed by use of the Single Life Table in Section 1.401(a)(9)-9, Q&A-1 of the Treasury regulations.

(iv) **Participant's Account Balance**. The Account Balance as of the last valuation date in the calendar year immediately preceding the distribution calendar year (valuation calendar year) increased by the amount of any contributions made and allocated or forfeitures allocated to the Account Balance as of dates in the valuation calendar year after the valuation date and decreased by distributions made in the valuation calendar year after the valuation date. The Account Balance for the valuation calendar year includes any amounts rolled over or transferred to the Plan either in the valuation calendar year or in the distribution calendar year if distributed or transferred in the valuation calendar year.

6.15 **Withdrawals from Participant Rollover Account:** A Participant may request and receive a distribution from his Participant Rollover Account at any time, even if he or she has not terminated employment, unless the rollover was from a defined benefit retirement plan sponsored by the Employer.

ARTICLE VII.
Notices

7.1 **Notice to Oklahoma Municipal Retirement Fund:** As soon as practicable after a Participant ceases to be in the employ of the Employer, the Committee shall give written notice to the Oklahoma Municipal Retirement Fund. The notice shall include such of the following information and directions as are necessary or advisable under circumstances:

(a) name and address of the Participant;

(b) reason he ceased to be in the Employer's employ;

(c) name and address of the Beneficiary or Beneficiaries in case of Participant's death;

(d) percentage or amount to which such Participant is entitled in case of termination of employment;

(e) time, manner and amount of payments to be made to such Participant; and

(f) information required to complete the Trustee's Withholding Election Form.

As soon as practicable after the Committee learns of the death of a Participant, it shall give like notice to the Oklahoma Municipal Retirement Fund.

7.2 **Subsequent Notices:** At any time and from time to time after giving the notice as provided for in Section 7.1, the Committee may modify such original notice or any subsequent notice by means of a further written notice or notices to the Oklahoma Municipal Retirement Fund, but any action taken or payments made by the Oklahoma Municipal Retirement Fund pursuant to a prior notice shall not be affected by a subsequent notice.

7.3 **Copy of Notice:** A copy of each notice provided for in Sections 7.1 and 7.2 shall be mailed by the Committee to the Participant or to each Beneficiary involved, as the case may be, but if, for any reason, such copy is not sent or received, that fact shall not affect the validity of any notice to the Oklahoma Municipal Retirement Fund nor the validity of any action taken or payment made pursuant thereto.

7.4 **Reliance Upon Notice:** Upon receipt of any notice as provided in this Article VII, the Oklahoma Municipal Retirement Fund shall promptly take whatever action and make whatever payments are called for therein, it being intended that the Oklahoma Municipal Retirement Fund may rely upon the information and directions in such notice absolutely and without question. However, the Oklahoma Municipal Retirement Fund may call to the attention of the Committee any error or oversight which the Oklahoma Municipal Retirement Fund believes to exist in any notice.

ARTICLE VIII.
Amendment and Termination

8.1 **Termination of Plan:** The Employer may at any time, effective as specified, terminate the Plan and may direct and require the Oklahoma Municipal Retirement Fund to liquidate the Fund. In the event the Employer shall for any reason cease to exist, the Plan shall terminate and the Fund shall be liquidated. In the event of the termination, partial termination, or complete discontinuance of contributions hereunder, the Account balances of each Participant will become nonforfeitable.

8.2 **Suspension and Discontinuance of Contributions:** If the governing body of the Employer decides it is impossible or inadvisable to continue to make contributions to the Plan, it shall have the power by appropriate resolution or decision to:

(a) suspend contributions to the Plan;

(b) discontinue contributions to the Plan; or

(c) terminate the Plan.

Suspension shall be a temporary cessation of contributions and shall not constitute or require a termination of the Plan. A discontinuance of contributions shall not constitute a formal termination of the Plan and shall not preclude later contributions but all Municipality Contribution Accounts not theretofore fully vested shall become fully vested in the respective Participants notwithstanding the provisions of Section 6.4. In such event, Employees who become eligible to enter the Plan subsequent to the discontinuance shall receive no benefits. After the date of a discontinuance of contributions, the Trust shall remain in existence as provided in this Section 8.2 and the provisions of the Plan and Trust shall remain in force. A certified copy of such decision or resolution shall be delivered to the Oklahoma Municipal Retirement Fund, and as soon as possible thereafter the Oklahoma Municipal Retirement Fund shall send or deliver to each Participant or Beneficiary concerned a copy thereof.

8.3 **Liquidation of Trust Fund:** Upon a complete termination or upon a partial termination of the Plan, unless the Employer's successor shall elect to continue the Plan, the Accounts of all Participants and Beneficiaries shall thereupon be and become fully vested. Upon a complete termination, the Oklahoma Municipal Retirement Fund shall convert the proportionate interest of such Participants and Beneficiaries in the Trust Fund to cash and, after deducting all charges and expenses, the Oklahoma Municipal Retirement Fund shall adjust the balances of such Accounts as provided in Section 5.5 treating the termination date as the current Valuation Date.

Thereafter, the Oklahoma Municipal Retirement Fund shall distribute as soon as administratively feasible the amount to the credit of each such Participant and Beneficiary as the Committee shall direct.

8.4 **Amendments:** Each Employer agrees to adopt any amendments to this Plan which are necessary for an initial or continued determination that the Plan is a qualified, tax exempt plan under Sections 401(a) and 501(a) of the Code. Any such amendments will be an amendment of the Employer's separate Plan if approved by the Trustee. The Employer may amend its separate

Plan in any respect and at any time, subject to the limitations of the Plan, by amendment of or addition to the Joinder Agreement. However, the Oklahoma Municipal Retirement Fund reserves the right to approve all Employer amendments.

8.5 **Provider's Power to Amend for Adopting Employers:** The Provider, as defined in section 4.08 of Rev. Proc. 2017-41, may amend any part of the Plan. However, for purposes of reliance on an Opinion Letter (as defined in Rev. Proc. 2017-41), the Provider will no longer have the authority to amend the Plan on behalf of the Employer as of the date (1) the Employer amends the Plan to incorporate a type of plan described in section 6.03 of Rev. Proc. 2017-41 that is not permitted under the Pre-Approved Plan program, or (2) the Internal Revenue Service notifies the Employer, in accordance with section 8.06(3) of Rev. Proc. 2017-41, that the Plan is an individually designed plan due to the nature and extent of Employer amendments to the Plan.

ARTICLE IX.
Employment Transfers

9.1 **Transfers from This Plan:**

(a) To Another Category with This Employer: If a Participant is employed by the Employer and is transferred to employment with this Employer but under another department, classification or category, so that he is no longer eligible to participate in this Plan, such participation shall thereupon cease and his Account balance shall remain in the Fund and will continue to accrue interest but he will not continue to accrue Service for the purpose of additional vesting credit for benefits under this Plan. However, if an Employee participates in any other plan sponsored by the Employer within the Fund, he or she will continue to accrue service under this Plan for vesting purposes only.

(b) To Another Municipality: If a Participant's employment by the Employer is terminated by virtue of his transfer to employment with another Municipality, his membership in this Plan shall thereupon cease and he shall be subject to the following rules and requirements relating to this Plan and his right and benefits hereunder, to-wit:

(i) if he is fully vested under this Plan as of the date of such employment transfer, he shall be entitled to take any distribution, full or partial, without any effect on his current vesting status; or

(ii) if he is not fully vested under this Plan as of the date of such employment transfer, and he is, immediately upon such transfer of employment, covered by the retirement system under which such other Municipality participates in the Oklahoma Municipal Retirement Fund, he will continue to accrue Service for the purpose of additional vesting credit for benefits under this Plan. However, upon any distribution (that would not be optional to an active Employee), full or partial, vesting will stop and any unvested balance, if any, will be forfeited.

9.2 **Transfers to This Plan:**

(a) From Another Category with This Employer: If a person becomes a Participant immediately upon his transfer from full-time, regular employment with this Employer under another department, classification or category where he is ineligible for membership only because of the type of such employment, his Service accrued by virtue of such prior employment shall not be counted in determining his vesting credit for benefits hereunder.

(b) From Another Municipality: If a person becomes a Participant immediately upon his transfer from full-time, regular employment with a Municipality other than this Employer, his Service accrued by virtue of such prior employment shall be counted in determining his vesting credit for benefits hereunder, and he shall also be subject to all the other provisions of this Plan. A Participant's eligibility for membership under this Plan will be determined by applying the eligibility requirements in the Joinder Agreement as though the date which his credited Service from the other Municipality began was his date of employment with this Employer. Service from such prior employment will however be ignored in its entirety upon any distribution from that Municipality, full or partial, if taken prior to its full vesting.

(c) **Previously Fully Vested With Another Municipality:** With respect to a Participant who was previously 100% vested in any other Municipality's qualified retirement plan prior to becoming a Participant in this Plan, such Participant's "Service" for purposes of determining years of service for vesting under this Plan shall include the Participant's last continuous period during which the Participant was an Employee of the other Municipality.

9.3 **Notice of Transfers:** Immediately after any transfer of employment referred to in Sections 9.1 or 9.2, the transferred Participant shall give written notice of such transfer to the Authorized Agent on a form furnished by the Authorized Agent. Such Participant shall not be penalized, however, for failure to give such notice. The Authorized Agent shall give immediate notice in writing of such transfers to the Trust Service Provider and the Committee.

9.4 **Transfer from Other Qualified Plans:** The Employer may cause to be transferred to the Oklahoma Municipal Retirement Fund all or any of the assets held in respect to any plan or trust which satisfied the applicable requirements of the Code relating to qualified plans and trusts, which is maintained by the Employer for the benefit of its Employees. Any such assets so transferred shall be accompanied by written instructions from the Employer, or the trustee or custodian or the individual holding such assets, setting forth the Participants for whose benefit such assets have been transferred and showing separately the respective contributions by the Employer and by the Participants and the current value of the assets attributable thereto. Upon receipt of such assets and instructions the Oklahoma Municipal Retirement Fund shall thereafter proceed in accordance with the provisions of the Fund.

9.5 **Rollover Contributions:** A Participant who is or was entitled to receive an eligible rollover distribution, as defined in Code Section 402(c)(4) and Treasury Regulations issued thereunder, from a qualified plan described in Section 401(a) or 403(a) of the Code (including after-tax employee contributions), an annuity contract described in Section 403(b) of the Code (including after-tax employee contributions, or an eligible plan under Section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state, or an individual retirement account may elect to contribute all or any portion of such distribution to the Trust directly from such qualified plan, annuity contract or eligible plan, or within 60 days of receipt of such distribution to the Participant. Rollover Contributions shall only be made in the form of cash, or, if and to the extent permitted by the Employer with the consent of the Trustee, promissory notes evidencing a plan loan to the Participant; provided, however, that Rollover Contributions shall only be permitted in the form of promissory notes if the Plan otherwise provides for loans.

The Committee shall develop such procedures and require such information from Participants as it deems necessary to ensure that amounts contributed under this Section 9.5 meet the requirements for tax-deferred rollovers established by this Section 9.5 and by Code Section 402(c). No Rollover Contributions may be made to the Plan until approved by the Committee.

If a Rollover Contribution made under this Section 9.5 is later determined by the Administrator not to have met the requirements of this Section 9.5 or of the Code or Treasury regulations, then, within a reasonable time after such determination is made, the amounts then held in the Trust attributable to such Rollover Contribution shall be distributed to the Employee.

A Participant's Rollover Contributions Account shall be subject to the terms of the Plan except as otherwise provided in this Section 9.5.

Notwithstanding any other provision of this Section 9.5, the Employer may direct the Trustee not to accept Rollover contributions.

9.6 **Transfer to Other Qualified Plans:** The Employer, by written direction to the Oklahoma Municipal Retirement Fund, may transfer some or all of the assets held under the Fund to another plan or trust meeting the requirements of the Code relating to qualified plans and trusts. In the case of any merger or consolidation with, or transfer of assets and liabilities to, any other plan, provisions shall be made so that each Participant in the Plan on the date thereof (if the Plan then terminated) would receive a benefit immediately after the merger, consolidation or transfer which is equal to or greater than the benefit he would have been entitled to receive immediately prior to the merger, consolidation or transfer (if the Plan had then terminated).

9.7 **Rollover to Another Plan or IRA:**

(a) General: Notwithstanding any provision of the Plan to the contrary that would otherwise limit a Distributee's election under this Section, a Distributee may elect, at the time and in the manner prescribed by the Committee, to have any portion of an Eligible Rollover Distribution paid directly to an Eligible Retirement Plan specified by the Distributee in a Direct Rollover. The Committee shall establish procedures for implementing such Direct Rollover distribution.

(b) Definitions: For purposes of this Section 9.7, the following definitions shall apply:

(i) "Eligible Rollover Distribution": An "Eligible Rollover Distribution" is any distribution of all or any portion of the balance to the credit of the Distributee, except that an Eligible Rollover Distribution does not include: any distribution that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the Distributee or the joint lives (or joint life expectancies) of the Distributee and the Distributee's designated Beneficiary, or for a specified period of 10 years or more; any distribution to the extent such distribution is required under Section 401(a)(9) of the Code; the portion of any distribution that is not includable in gross income (determined without regard to the exclusion for net unrealized appreciation with respect to Employer Stock); and any distributions attributable to a hardship. With respect to distributions made after December 31, 2001, for purposes of the direct rollover provisions in Section 9.7 of the Plan, a portion of a distribution shall not fail to be an eligible rollover distribution merely because the portion consists of after-tax employee contributions which are not includible in gross income. However, such portion may be transferred only to (i) an individual retirement account or annuity described in Section 408(a) or (b) of the Code or, effective for distributions on or after January 1, 2008, a Roth individual retirement account of annuity described in Section 408A of the Code, or (ii) a qualified defined contribution plan described in Section 401(a) or 403(a) of the Code that agrees to separately account for amounts so transferred, including separately accounting for the portion of such distribution which is includible in gross income and the portion of such distribution which is not so includible.

(ii) **"Eligible Retirement Plan"**: An "Eligible Retirement Plan" is an individual retirement account described in Section 408(a) of the Code, an individual retirement annuity described in Section 408(b) of the Code, an annuity plan described in Section 403(a) of the Code, or a qualified plan described in Section 401(a) of the Code, an annuity contract described in Section 403(b) of the Code and an eligible plan under Section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and which agrees to separately account for amounts transferred into such plan from this Plan; or, effective January 1, 2008, a Roth IRA described in Code Section 408A(b), that accepts the Distributee's Eligible Rollover Distribution. However, in the case of an Eligible Rollover Distribution to the surviving spouse or a Participant's surviving Beneficiary, an Eligible Retirement Plan is an individual retirement account or individual retirement annuity. The definition of Eligible Retirement Plan shall also apply in the case of a distribution to a surviving spouse, or to a spouse or former spouse who is the alternate payee under a qualified domestic relation order, as defined in Section 414(p) of the Code. If any portion of an Eligible Rollover Distribution is attributable to payments or distributions from a designated Roth account, an Eligible Retirement Plan with respect to such portion shall include only another designated Roth account of the individual from whose account the payments or distributions were made, or a Roth IRA of such individual. In the case of a nonspouse beneficiary, the direct rollover may be made only to an individual retirement account or annuity described in Code Section 408(a) or 408(b) ("IRA") that is established on behalf of the designated Beneficiary and that will be treated as an inherited IRA pursuant to the provisions of Code Section 402(c)(ii). Further, the determination of any required minimum distribution under Code Section 401(a)(9) that is ineligible for rollover shall be made in accordance with IRS Notice 2007-7, Q&A 17 and 18, 2007-5 I.R.B. 395.

(iii) **"Distributee"**: A "Distributee" includes a Participant or former Participant. In addition, the Participant's spouse or former Participant's surviving spouse or surviving Beneficiary (effective January 1, 2007) and the Participant's or former Participant's spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in Section 414(p) of the Code, are distributees with regard to the interest of the spouse or former spouse.

(iv) **"Direct Rollover"**: A "Direct Rollover" is a payment by the Plan directly to the Eligible Retirement Plan specified by the Distributee.

9.8 **Requirements for Rollover by Individuals:** An Employee (whether or not a Participant under this Plan), who, as a result of a termination of another plan qualified under Section 401(a) of the Code, a termination of employment, disability or attainment of age 59½ years, has had distributed to him his entire interest in a plan which meets the requirements of Section 401(a) of the Code (hereinafter referred to as the "Other Plan") may, in accordance with procedures approved by the Committee, transfer all or any part of the distribution received from the Other Plan to the Trustees under this Plan, provided the following conditions are met:

(a) the transfer occurs on or before the 60th day following his receipt of the distribution from the Other Plan, or, if such distribution had previously been deposited in an individual retirement account (as defined in Section 408 of the Code), the transfer occurs on or

before the 60th day following his receipt of such distribution, plus earnings thereon from such individual retirement account;

(b) the distribution from the Other Plan qualifies as a lump sum distribution within the meaning of Subsection 402(e)(4)(A) of the Code or is a result of a termination of another plan qualified under Section 401(a) of the Code; and

(c) the amount transferred shall not exceed the distribution he received from the Other Plan, less the amount, if any, considered contributed by him in accordance with Subsection 402(e)(4)(D)(i) of the Code, plus earnings thereon during the period, if any, in which the amount was held in an individual retirement account.

9.9 **Transfers From Another Qualified Plan:**

(a) With respect to an Employee (whether or not a Participant under this Plan), who has an undistributed account balance in another plan which meets the requirements of Section 401(a) of the Code (hereinafter referred to as the "Other Plan"), the Committee may, in its sole discretion, approve a direct transfer of such account balance from the Other Plan to the Trustees under this Plan.

(b) If the Plan receives a direct transfer (by merger or otherwise) of elective contributions (or amounts treated as elective contributions) under a plan with a Section 401(k) arrangement, the distribution restrictions of Sections 401(k)(2) and (10) of the Code continue to apply to those transferred elective contributions.

9.10 **Procedures:** With respect to transfers under either Section 9.8 or 9.9 herein, the Committee shall develop such procedures, and may require such information from an Employee or the fiduciaries of the Other Plan desiring to make such a transfer, as it deems necessary or desirable to determine that the proposed transfer will meet requirements of this Article and the law. Upon approval by the Committee, the amount transferred shall be deposited in the Trust Fund and shall be credited to a Rollover Account established in the Employee's name. Such Account shall be 100% vested in and nonforfeitable by the Employee, shall share in increases and decreases thereon determined in accordance with the Plan, but shall not share in Employer Contributions or Forfeitures. Upon termination of employment, the total amount of Employee's Participant Rollover Account shall be distributed as part of his Benefit.

ARTICLE X.
Administration

10.1 **Administration:** The Plan shall be administered by the Committee which is hereby created and established and which shall be composed of the members of the City Council of the Employer. The duties of the Committee shall be performed without compensation other than the compensation, if any, which they receive as officers of the Employer unless additional compensation is specifically provided for by action of the City Council. Any usual and reasonable expenses incurred by the Committee in the administration of this Fund and Plan shall be paid by the Employer.

(a) Committee: The Committee shall have such powers as may be necessary to discharge its duties hereunder and under the document creating the Oklahoma Municipal Retirement Fund, and under the contract for the pooling of the Fund with similar funds of other Municipalities. Such powers shall include but not be limited to the following powers and duties:

(1) to delegate to, specify, direct, and supervise the performance of duties of the Authorized Agent, as the agent of the Employer and Committee in matters relating to the Plan, the Fund, and the Oklahoma Municipal Retirement Fund, including but not limited to, the duties set forth below in Subsection 10.1(b) and including any duties of the Employer under the Plan, or as set forth in this Subsection 10.1(a);

(2) acting by direction to the Authorized Agent to file a petition for nomination, or otherwise nominate, and cause the ballot for the election of Trustees of the Oklahoma Municipal Retirement Fund;

(3) to construe and interpret the Plan and resolve any ambiguities with respect to any of the terms and provisions thereof as written and as applied to the operation of the Plan;

(4) to decide all questions of eligibility and determine the amount, manner and time of payment of any benefits hereunder;

(5) to prescribe procedures to be followed by Participants in filing applications for benefits;

(6) to make a determination as to the right of any person to a benefit and to afford any person dissatisfied with such determination the right to a hearing thereon;

(7) to receive from the Employer, the Trustees, the Trust Service Provider and the Authorized Agent, such information as shall be necessary for the proper administration of the Plan;

(8) to prepare and distribute, in such manner as it determines to be appropriate, information explaining the Plan;

(9) to furnish the Employer, upon request, such annual reports with respect to the administration of the Plan as are reasonable and appropriate;

(10) to receive and review reports from the auditor appointed by the Trustees, the City Treasurer and City Auditors, of the financial condition of the Fund;

(11) to have full power, to manage and control, the Plan and Fund and to authorize in writing, all payments from the Fund by written direction of the Authorized Agent, or otherwise;

(12) to sue in any court of competent jurisdiction for the enforcement of any contract, claim or other right, and to defend against or to compromise, settle or otherwise dispose of any claim or suit against the Employer, the Plan, or the City Treasurer, as Treasurer of the Plan; and

(13) to appoint such person or persons as necessary to perform the following:

a. to receive and separately account for, payments, appropriations, apportionments, allocations, payroll deductions, and any other assets, which are for, or consist of contributions or assets under the Plan for the Fund, which are made by the Employer, the Participants, or from any other source;

b. to transfer, remit, pay over and deliver, upon the written direction of the Authorized Agent, as soon as practicable after his receipt thereof, all such contributions and assets, to the Oklahoma Municipal Retirement Fund for management and investment;

c. to keep as evidence and permanent records, all such written directions of the Authorized Agent for such transfers and disbursements, maintain accurate accounts and records of such receipts, transfers and disbursements, and keep such other records and furnish such information and advice to the Employer, the City Council, the Committee and the Authorized Agent as may be necessary and proper for the performance of such duties in coordinating the administration and operation of the Plan;

d. maintain such records including vital statistics on health, age, sex, birth, death, Compensation and length of Service of all the Participants of the Employer or their beneficiaries who are included in the Plan or who are, or may become eligible for such inclusion, as are necessary for the proper administration of the Plan, and furnish such information as is requested by the Authorized Agent, or is requested by the Administrator;

e. notify the Authorized Agent when any Participant is eligible for Retirement under the Plan; and

f. attend meetings of the Committee while matters pertaining to the Plan, the Employees or their beneficiaries are under consideration.

The Committee shall have no power to waive or fail to apply any requirements of eligibility for a Benefit under the Plan. The Committee may adopt such rules, regulations and actuarial tables as it deems necessary or desirable to administer the Plan. All such rules,

regulations and decisions shall be uniformly and consistently applied to all Employees in similar circumstances.

Any such rule or decision which is not inconsistent with the provisions of the Plan shall be conclusive and binding upon all persons affected by it and there shall be no appeal from any ruling by the Committee which is within its authority.

When making a determination or calculation, the Committee shall be entitled to rely upon information furnished by the Trustees, the Trust Service Provider, the Employer, the Authorized Agent, the legal counsel of the Employer, or the actuary for the Plan.

(b) Authorized Agent: An Authorized Agent shall be designated in writing by the Committee and shall act as the agent of the Employer (but not the agent of the Trustees or the Trust Service Provider of the Oklahoma Municipal Retirement Fund) in matters pertaining to the Plan, the Fund and the Oklahoma Municipal Retirement Fund, to centralize in one person the local administration and coordination thereof, and to file payroll and contribution information, to file claims, forms and applications for Participants, and to advise Participants, the Employer and the Committee. The Authorized Agent, under the control and direction of the Committee, shall have such general duties as the Employer and the Committee may deem necessary and proper for such purposes, which duties shall include but not be limited to, the following:

(1) to coordinate the deduction of Participant contributions and to see that Employer and Participant contributions are properly received and forwarded promptly to the Oklahoma Municipal Retirement Fund for management and investment;

(2) to forward any communications directed to Participants and beneficiaries by the Trustees, the Trust Service Provider or the Oklahoma Municipal Retirement Fund;

(3) to lend assistance to Participants and beneficiaries in filing applications for benefits, and in communicating with the Employer, the Committee and the Trustees or the Trust Service Provider of the Oklahoma Municipal Retirement Fund and to forward such communications to the addressees;

(4) to assist the Committee in determining whether or not Employees are eligible for participation in the Plan;

(5) to certify at the direction of the Committee that a Participant is on an authorized leave of absence, paid or unpaid; and

(6) to file at the direction of the Committee a petition or nomination, and cast a ballot for election of Trustees of the Oklahoma Municipal Retirement Fund.

(c) Plan Counselor: The Committee of the Employer shall appoint the legal advisor of the Employer and the Committee, and such legal advisor shall represent them in any legal matters, proceedings, or litigation.

10.2 **Bonds:** No bond to secure the performance of administrative duties in the operation of the Plan and Fund, shall be required of any persons or organizations unless required by law, or unless required by the Trust Indenture establishing The Oklahoma Municipal Retirement Fund, or unless required by the Employer for any persons or organizations engaged in the

administration of the Plan. If such a bond is required by law, the Trustees or the Employer, the premiums therefor shall be paid as expenses of the Oklahoma Municipal Retirement Fund as to its members, agents, employees, Municipal Retirement Fund, or as expenses of the Employer as to the administration of the Plan. Any agents, officials or Employees of the Employer engaged in the administration of the Plan shall be covered as to the performance of such administrative duties, by any official or other bond covering their regular duties otherwise.

10.3 **Benefit Payments:** All benefits are to be paid pursuant to the provisions of the Plan out of the applicable portion of the Oklahoma Municipal Retirement Fund.

10.4 **Abandonment of Benefits:**

(a) If, anytime following the date either of a Participant or Beneficiary of a deceased Participant becomes entitled to receive any non-deferred benefits under the Plan, then, if the whereabouts of such Participant or Beneficiary is unknown, the benefits may be forfeited in certain limited circumstances as provided hereafter. If the Committee has mailed to the Participant or Beneficiary notice of the present right to receive benefits, and the Committee mails such notice again after one year, then, if no claim has been received by the second anniversary of the first mailing of the notice, the Accounts representing unclaimed Benefits (including those holding Employee contributions) can be forfeited pursuant to Section 5.4 herein.

(b) Each Participant and Beneficiary shall file with the Committee, from time to time in writing, their post office address and each change of post office address, if any, and the Committee shall not be obliged to search for or ascertain the whereabouts of any Participant or Beneficiary. Any communication addressed to a Participant or Beneficiary at their last post office address filed with the Committee, or if no such address was filed, then at their last post office address as shown on the Employer's records, shall be binding on the Participant and the Beneficiary for all purposes of the Plan and Trust.

(c) In the event that the whereabouts of a lost Participant, or lost Beneficiary of a deceased Participant, ever becomes known to the Committee, and either of such parties makes a claim for benefits, the Committee shall, if the Plan is in existence, reinstate any Benefits which have been previously forfeited to satisfy such claim; provided, the amount reinstated shall, in any event, be equal to the amount of the forfeited benefit unadjusted by any increases or decreases under Section 5.6 herein occurring after such forfeitures were allocated. Reinstated Forfeitures shall be satisfied from the following sources in the priority indicated: (i) unallocated Forfeitures, (ii) unallocated Fund increases, or (iii) Employer contributions which the Employer shall make if necessary to satisfy such reinstatement. For purposes of this Subsection (c), the limitations under Section 415 of the Code shall not apply.

10.5 **Benefits Payable to Incompetents:** Any payments due hereunder to a minor or other person under legal disability may be made, at the discretion of the Committee, to a valid power of attorney, a court appointed guardian, or any other person authorized under state law to receive the benefit. The Committee shall not be required to see to the application of any such payment, and the payee's receipt shall be a full and final discharge of all responsibility hereunder of the Employer, the Committee and the Trustees.

ARTICLE XI.
General

11.1 **USERRA:** Notwithstanding any provision of this Plan to the contrary, effective December 12, 1994, contributions, benefits and service credit with respect to qualified military service will be provided in accordance with Section 414(u) of the Code. A Participant returning from military service shall not be entitled to catch-up on Pick-Up Contributions missed during such military service.

11.2 **Not Contract Between Employer and Participant:** Neither the creation of this Plan, nor any amendment to it, nor the creation of any fund, nor the payment of benefits hereunder shall be construed as giving any legal or equitable right to any Participant against the Employer or against the Oklahoma Municipal Retirement Fund, except as provided herein, and all liabilities under this Plan shall be satisfied, if at all, only out of the Fund held by the Oklahoma Municipal Retirement Fund. Participation in the Plan shall not give any Participant any right to be retained in the employ of the Employer, and the Employer hereby expressly retains the right to hire and discharge any Participant at any time with or without cause, as if this Plan had not been adopted, and any such discharged Participant shall have only such rights or interests in the Fund as may be specified herein.

11.3 **Payment of Fees:** The Employer shall pay a fee in an amount determined and revised from time to time by the Oklahoma Municipal Retirement Fund.

11.4 **Governing Law:** The validity, construction and administration of this Plan shall be determined under the laws of the State of Oklahoma.

11.5 **Counterpart Execution:** This Plan may be executed in two or more counterparts, as may be all amendments thereto be executed, and any one of the executed copies shall be deemed an original.

11.6 **Severability:** Every provision of this Agreement is intended to be severable. If any term or provision hereof is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of this Plan.

11.7 **Spendthrift Provisions:** Benefits payable under this Plan shall not be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, charge, garnishment, execution or levy of any kind, either voluntary or involuntary, including any such liability which is for alimony or other payments for the support of a spouse or former spouse, or for any other support of a spouse or former spouse, or for any other relative of the Employee, prior to actually being received by the person entitled to the benefit under the terms of the Plan; and any attempt to anticipate, alienate, sell, transfer, assign, pledge, encumber, charge or otherwise dispose of any right to benefits payable hereunder, shall be void. The Fund shall not in any manner be liable for, or subject to, the debts, contracts, liabilities, engagements or torts of any person entitled to benefits hereunder. The preceding provisions shall not apply to the creation, assignment or recognition of a right to any benefit payable with respect to a Participant pursuant to a domestic relations order, and does not preclude the Oklahoma Municipal

Retirement Fund from complying with a court order requiring deduction from the benefits of a Participant in pay status for alimony and support payments.

11.8 **Maximum Duration:** Nothing herein shall be construed to suspend the power of alienation or prevent the vesting of the interest of any person in the Plan for a longer period than the duration of the lives of the designated Beneficiaries of a particular interest therein in being at the time such designation becomes irrevocable, plus twenty-one (21) years; if any provisions shall be held to violate a rule or law against restraints on alienation or remote vesting, the Plan shall not be vitiated thereby, but the Plan, or the portion of the Plan thus affected, shall immediately be distributed to those entitled as their interest shall then appear.

11.9 **Number and Gender:** Pronouns and other similar words used herein in the masculine gender shall be read as the feminine gender where appropriate; pronouns and other similar words used herein in the neuter gender shall be read as the masculine or feminine gender where appropriate; and the singular form of words shall be read as the plural where appropriate.

11.10 **Compensation and Expenses of Administration:** If a Trustee, a member of Oklahoma Municipal Retirement Fund, or a member of the Committee is an Employee of the Employer, he shall serve without any additional compensation. The Employer may pay all or part of the expenses of administration of the Plan, including the compensation and expenses of the Trustee, and any other expenses incurred at the direction of the Oklahoma Municipal Retirement Fund, including, without limitation, fees of actuaries, accountants, attorneys, investment managers, investment advisors and other specialists, and any other costs of administering the Plan. To the extent that any of such expenses are not paid by the Employer, such expenses shall be paid by the Oklahoma Municipal Retirement Fund out of the Fund. In addition, the Plan or Trustees shall be authorized to charge to a Participant's Account any direct expenses it incurs in connection with such Account, which shall include by example, and not by limitation, expenses resulting from a Participant's QDRO, bankruptcy or default on a Plan loan, and expenses incurred in attempting to locate a Participant. Trustees shall have the power under this Section in their sole discretion to determine the items and amounts thereof which should equitably and reasonably be charged to a particular Account. If such charges exceed the balance in a Participant's Accounts, the excess shall be charged to the general Trust Fund.

11.11 **Supercession of Inconsistent Provisions:** The provisions of the Plan override any conflicting provision contained in the Trust or custodial account documents used with the Plan.

11.12 **Mistake of Fact:** All contributions to the Plan are made subject to the correctness of the amount. In the event a contribution is made to the Plan and Trust by the Employer under a mistake of fact concerning the correctness of such contribution, then the Oklahoma Municipal Retirement Fund shall return such portion of such contribution which is in excess of the amount that would have been contributed had there not occurred a mistake of fact within one year after the payment of the contribution to the Oklahoma Municipal Retirement Fund.

In the case of amounts returned pursuant to this Section 11.12, no earnings attributable to such amounts may be returned to the Employer, but losses attributable thereto shall reduce the amount returned, and no such return shall reduce the balance of any Participant's Municipality

Contribution Accounts to less than the balance which would have been credited thereto had such amount not been contributed.

11.13 **Written Notices:** Any reference herein to written notices or documents or notices or elections in writing shall be deemed to include any method of communication acceptable to the Oklahoma Municipal Retirement Fund, and subject to applicable requirements of Treas. Reg. Section 1.401(a)-21.

IN WITNESS WHEREOF, and as conclusive evidence of the adoption of the foregoing instrument comprising the Plan, the Oklahoma Municipal Retirement Fund, has caused its corporate seal to be affixed hereto and these presents to be duly executed in its name and behalf by its proper officers thereunto authorized this 17th day of December, 2021.

OKLAHOMA MUNICIPAL RETIREMENT FUND

By _____

ATTEST:

By _____
Secretary

STATE OF OKLAHOMA)
) ss.
COUNTY OF OKLAHOMA)

BEFORE ME, the undersigned a Notary Public in and for said County and State, on this 17 day of December, 2021, personally appeared Donna Doden, to me known to be the identical person who subscribed the name of the Oklahoma Municipal Retirement Fund, a municipal corporation, to the foregoing instrument as its Chairperson and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, the day and year last above written.

_____
Notary Public

My Commission Expires:
09/27/2025

My Commission No.: 21012746

(NOTARY SEAL)

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE EMPLOYEE RETIREMENT SYSTEM, DEFINED CONTRIBUTION PLAN FOR THE CITY OF SHAWNEE, OKLAHOMA BY ADOPTING A REVISED AND RESTATED RETIREMENT PLAN; PROVIDING RETIREMENT BENEFITS FOR ELIGIBLE EMPLOYEES OF THE CITY OF SHAWNEE, OKLAHOMA; PROVIDING FOR PURPOSE AND ORGANIZATION; PROVIDING FOR DEFINITIONS; PROVIDING FOR ELIGIBILITY AND PARTICIPATION; PROVIDING FOR NON-ALIENATION OF BENEFITS; PROVIDING FOR EMPLOYER AND EMPLOYEE CONTRIBUTIONS; PROVIDING FOR ACCOUNTING, ALLOCATION, AND VALUATION; PROVIDING BENEFITS; PROVIDING FOR REQUIRED NOTICE; PROVIDING FOR AMENDMENTS AND TERMINATION; PROVIDING FOR TRANSFER TO AND FROM OTHER PLANS; CREATING A RETIREMENT COMMITTEE AND PROVIDING FOR POWERS, DUTIES, AND RIGHTS OF RETIREMENT COMMITTEE; PROVIDING FOR PAYMENT OF CERTAIN OBLIGATIONS; PROVIDING FOR DURATION AND PAYMENT OF EXPENSES; PROVIDING FOR EFFECTIVE DATE; PROVIDING FOR VESTING SCHEDULES; PROVIDING FOR A FUND TO FINANCE THE SYSTEM TO BE POOLED WITH OTHER INCORPORATED CITIES, TOWNS AND THEIR AGENCIES AND INSTRUMENTALITIES FOR PURPOSES OF ADMINISTRATION, MANAGEMENT, AND INVESTMENT AS PART OF THE OKLAHOMA MUNICIPAL RETIREMENT FUND; PROVIDING FOR PAYMENT OF ALL CONTRIBUTIONS UNDER THE SYSTEM TO THE OKLAHOMA MUNICIPAL RETIREMENT FUND FOR MANAGEMENT AND INVESTMENT; PROVIDING FOR REPEALER AND SEVERABILITY; ADOPTING THOSE AMENDMENTS MANDATED BY THE INTERNAL REVENUE CODE; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COMMISSION OF SHAWNEE, OKLAHOMA:

Section 1. That pursuant to the authority conferred by the laws of the State of Oklahoma, and for the purpose of encouraging continuity and meritorious service on the part of City employees and thereby promote public efficiency, there is hereby authorized created, established, and approved and adopted, effective as of **April 1, 2022,** the amended and restated Plan designated "Employee Retirement System of the City of Shawnee**,** Oklahoma, Defined Contribution Plan," (hereinafter called System), an executed counterpart of which is marked Exhibit "A" (Joinder Agreement) and Exhibit "B" (amended and restated plan) and attached hereto as part hereof.

Section 2. FUND. A fund is hereby provided for the exclusive use and benefit of the persons entitled to benefits under the System. All contributions to such fund shall be paid over to and received in trust for such purpose by the City. Such Fund shall be pooled for purposes of management and investment with similar funds of other incorporated cities, towns, and municipal trusts in the State of Oklahoma as a part of the Oklahoma Municipal Retirement Fund in accordance with the trust agreement of the Oklahoma Municipal Retirement Fund, a public trust. The City shall hold such contributions in the form received, and from time to time pay over and transfer the same to the Oklahoma Municipal Retirement Fund**,** as duly authorized and directed by the Board of Trustees. The Fund shall be nonfiscal and shall not be considered in computing any levy when the annual estimate is made to the County Excise Board.

Section 3. APPROPRIATIONS. The City of Shawnee, Oklahoma, is hereby authorized to incur the necessary expenses for the establishment, operation, and administration of the System, and to appropriate and pay the same. In addition, the City of Shawnee, Oklahoma**,** is hereby authorized to appropriate annually such amounts as are required in addition to employee contributions to maintain the System and the Fund in accordance with the provisions of the Defined Contribution Plan. Any appropriation so made to maintain the System and Fund shall be for deferred wages or salaries, and for the payment of necessary expenses of operation and administration to be transferred to the trustees of the Oklahoma Municipal Retirement Fund for such purposes and shall be paid into the Fund when available, to be duly transferred to the Oklahoma Municipal Retirement Fund.

Section 4. EXECUTION. The Mayor and City Clerk be and they are each hereby authorized and directed to execute (in counterparts, each of which shall constitute an original) the System instrument, and to do all other acts and things necessary, advisable, and proper to put said

System and related trust into full force and effect, and to make such changes therein as may be necessary to qualify the same under Sections 401(a) and 501(a) of the Internal Revenue Code of the United States. The counterpart attached hereto as Exhibit "A" and Exhibit "B", which has been duly executed as aforesaid simultaneously with the passage of this Ordinance and made a part hereof, is hereby ratified and confirmed in all respects.

This Committee is hereby authorized and directed to proceed immediately on behalf of the City of Shawnee, Oklahoma, to pool and combine the Fund into the Oklahoma Municipal Retirement Fund as a part thereof, with similar funds of such other cities and towns, for purposes of pooled management and investment.

Section 5. REPEALER. Any Ordinance inconsistent with the terms and provisions of this Ordinance is hereby repealed, provided, however, that such repeal shall be only to the extent of such inconsistency and in all other respects this Ordinance shall be cumulative of other ordinances regulating and governing the subject matter covered by this Ordinance.

Section 6. SEVERABILITY. If, regardless of cause, any section, subsection, paragraph, sentence or clause of this Ordinance, including the System as set forth in Exhibit "A" and Exhibit "B"**,** is held invalid or to be unconstitutional, the remaining sections, subsections, paragraphs, sentences, or clauses shall continue in full force and effect and shall be construed thereafter as being the entire provisions of this Ordinance.

Section 7. **EMERGENCY**. Whereas, in the judgment of the City Commission of the **City of Shawnee,** Oklahoma, the public peace, health, safety, and welfare of the **City of Shawnee**, Oklahoma, and the inhabitants thereof demand the immediate passage of this ordinance, an emergency is hereby declared, the rules are suspended, and this ordinance shall be in full force and effect on its passage and approval.

*****END*****

The undersigned hereby certifies that the foregoing Ordinance was introduced before the City Commission of the City of Shawnee on the _____ day of _____, 20_____, and was duly adopted and approved by the Mayor and City Commission, on the _____ day of _____, 20_____, after compliance with notice requirements of the Open Meeting Law (25 OSA, Sections 301, et. seq.).

PASSED AND APPROVED this ___ day of _____, 2022.

_____
(SEAL) ED BOLT, MAYOR
ATTEST:

_____
LISA LASYONE, CMC, CITY CLERK

PASSED AND APPROVED and the emergency clause voted on separately this ___ day of _____**,** 2022.

_____
(SEAL) ED BOLT, MAYOR
ATTEST:

_____
LISA LASYONE, CMC, CITY CLERK

Approved as to form and legality this _____ day of _____, 2022

_____
JOSEPH M. VORNDRAN
CITY ATTORNEY

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN
JOINDER AGREEMENT

City of Shawnee [a municipality or authority chartered, incorporated or formed under the laws of Oklahoma], a city, town, agency, instrumentality, or public trust located in the State of Oklahoma, with its principal office at Shawnee, Oklahoma, hereby establishes a Defined Contribution Plan to be known as **City of Shawnee Plan** (the "Plan") in the form of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan.

Except as otherwise provided herein, the definitions in Article II of the Plan apply.

1. **Dates.**
   - [ ] This instrument is a new Plan effective __ ("Effective Date") [such date may not be earlier than the first day of the Plan Year in which it is executed].
   - [X] This instrument is an amendment, restatement, and continuation of the Previous Plan, which was originally effective October 1, 2001. The effective date of this Joinder Agreement is **April 1, 2022** ("Effective Date") [date may not be prior to Plan Year of the date of execution], except as otherwise stated in the Plan and the Joinder Agreement.
2. **Employee.**

   The word "Employee" shall mean:
   - [X] Any person, other than a Leased Employee, who, on or after the Effective Date, is considered to be a regular full-time employee in accordance with the Employer's standard personnel policies and practices, and is receiving remuneration for such services rendered to the Employer (including any elected official and any appointed officer or employee of any department of the Employer, whether governmental or proprietary in nature), including persons on Authorized Leave of Absence. Employees shall not include independent contractors. Elected members of the City Council shall not be considered to be Employees solely by reason of their holding such office.
   - [ ] Any person, other than a Leased Employee, who, on or after the Effective Date, is considered to be a regular employee in accordance with the Employer's standard personnel policies and practices (including part-time, seasonal and temporary employees), and is receiving remuneration for such services rendered to the Employer (including any elected official and any appointed officer or employee of any department of the Employer, whether governmental or proprietary in nature), including persons on Authorized Leave of Absence. Employees shall not include independent contractors. Elected members of the City Council shall not be considered to be Employees solely by reason of their holding such office.
   - [ ] Any person who, [ ] on or after the Effective Date, [ ] as of , holds the position of:
     - [ ] City Manager, City or Town Administrator, President, Chief Executive Officer, General Manager, or District Manager, as applicable.
     - [ ] Assistant City Manager [ ] Chief of Police [ ] Fire Chief
     - [ ] Department Head or Department Manager [ ] Finance Director or Chief Financial Officer
     - [ ] General Counsel or Municipal Attorney [ ] Municipal Judge
     - [ ] ___ (specify position)

   The word "Employee" shall not include:
   - [X] Any person who is currently accruing benefits under any other state retirement system.
   - [ ] Any person in the following position and who is covered under another retirement program or system approved by the City:
     - [ ] City Manager, City or Town Administrator, President, Chief Executive Officer, General Manager, or District Manager, as applicable.
     - [ ] Assistant City Manager [ ] Chief of Police [ ] Fire Chief
     - [ ] Department Head or Department Manager [ ] Finance Director or Chief Financial Officer
     - [ ] General Counsel or Municipal Attorney [ ] Municipal Judge
     - [ ] __ (specify position)
   - [X] Any person who was hired before July 1, 2013, who makes the one-time election as of September 1, 2013, to continue participation in the City of Shawnee Defined Benefit Plan. [description may include a position but not the name of an individual].

3. **Entry Date.**
Eligible Employees shall commence participation in the Plan: (Select only one)

[ ] months (any number of months up to twelve) after the later of the Employee's Employment Commencement Date or the date the definition of Employee in Section 2 hereof was met, provided that the individual has met the definition of Employee in Section 2 hereof throughout such period.

[X] On the Employee's Employment Commencement Date. (If the Employer has opted out of Old Age and Disability Insurance (OADI), this option must be elected).

4. **Definition of Compensation.**
Compensation shall exclude the item(s) listed below:

[ ] No exclusions.
[ ] Overtime pay.
[ ] Bonuses.
[ ] Commissions.
[ ] Longevity pay.
[X] Severance pay.
[ ] Fringe benefits, expense reimbursements, deferred compensation and welfare benefits.
[X] Accrued vacation or sick leave paid upon termination of employment and moving expenses.
[ ] Other: [must be definitely determinable]

5. **Plan Design.**
The Employer hereby elects the following Plan design:

[X] **Pick-up Option**. Each Employee shall be required to contribute to the Plan **4.25%** of his or her Compensation. These contributions shall be picked up and assumed by the Employer and paid to the Fund in lieu of contributions by the Participant. No Participant shall have the option of receiving the contributed amounts directly as Compensation.

[ ] **Thrift Plan Option**.

[ ] A Participant may elect to contribute to the Plan for each Valuation Period an amount which is at least 1%, but no more than ___% of his Compensation ("Mandatory Contributions"). Mandatory Contributions shall be made by payroll deductions. A Participant shall authorize such deductions in writing on forms approved by, and filed with the Committee.

[ ] The Employer shall contribute to the Fund an amount equal to ___% of the total Mandatory Contributions contributed by Participants.
The Employer contribution shall be allocated in the proportion which the Mandatory Contributions of each such Participant for such Valuation Period bear to the total Mandatory Contributions contributed by all such Participants for such Valuation Period. Forfeitures attributable to Employer contributions under the Thrift Plan Option of this Section 5 shall be used to reduce Employer contributions under such Option.

[X] **Fixed Option**. With respect to each Participant, for each payroll period during the Plan Year the Employer will make an Employer Contribution in an amount equal to the applicable percentage of the Participant's Compensation for the payroll period in accordance with the following table:

Effective September 1, 2013, Service and Employer Contribution Tiers for Participants hired prior to July 1, 2013:

Years of Service	Employer Contribution Percentage
Less than 5	5%
at least 5 but less than10	10%
10 or more	15%

Effective July 1, 2013, Service and Employer Contribution Tiers for Participants hired on or after July 1, 2013:

Years of Service	Employer Contribution Percentage
Less than 5	3%
at least 5 but less than10	6%
10 or more	9%

[X] **Variable Option**.

[X] The Employer intends to make a contribution to the Plan for the benefit of the Participants hired on or after July 1, 2013 for each Valuation Period. The contribution may be varied from year to year by the Employer. (Select one option below)

[ ] Option A: The Employer contribution shall be allocated in the proportion that each such Participant's total points awarded bear to the total points awarded to all Participants with respect to such year. A Participant shall be awarded one point for each Year of Service.

[X] Option B: The Employer contribution shall be allocated in the proportion which the Compensation of each such Participant for such Valuation Period bears to the Compensation paid to all such Participants for such Valuation Period.

[ ] Option C: A combination of Options A and B in the following ratios: % for Option A, and % for Option B.

[ ] **401(k) Option**.

(This Option available only if elected prior to May 1, 1986)

[ ] Participant Deferral Elections shall be allowed under the provisions of Section 4.8 of the Plan. Participants shall be allowed to defer no more than % of their Compensation for each election period.

[ ] Section 4.8(d) of the Plan ("Roth Elective Deferrals") shall apply to contributions after (enter a date later than January 1, 2006, but not earlier than the date the Roth option was initially adopted), and the Plan will accept a direct rollover from another Roth elective deferral account under an applicable retirement plan as described in Code Section 402A(e)(1).

[ ] **Matching Contribution Option**. The Employer shall contribute to the Fund an amount equal to % of the Participant's contributions under the Employer's Section 457(b) Deferred Compensation Plan. The Employer matching contribution shall be limited to % of the Participant's Compensation. Forfeitures attributable to Employer matching contributions under this Matching Contribution Option of Section 5 shall be used to reduce Employer matching contributions under such Option.

[ ] **No Employer Contribution Option**.

6. **Other Participant Contribution Options.**

[X] Voluntary Nondeductible Contributions by Participants shall be allowed under the provisions of Section 4.4 of the Plan.

[ ] A Participant may not withdraw Voluntary Nondeductible Contributions.

[ ] Participants shall not contribute to the Plan.

7. **Self-Directed Investments.**

[X] Are permitted.

[ ] Are not permitted.

8. **Allocation of Forfeitures Available.**

Forfeitures of Employer contributions attributable to the Fixed Option or Variable Option under Section 5 hereof:

[ ] Shall be added to Employer contribution under such Option for the calendar quarter following the Participant's Break in Service.

[X] Shall reduce the Employer contribution under such Option for the current or next following Plan Year.

9. Service for Worker's Compensation Period.

If a Participant is on an Authorized Leave of Absence and is receiving worker's compensation during such Authorized Leave of Absence, such Participant

[X] shall be credited with Service for such period for purposes of vesting only and not for purposes of allocations of Employer Contributions.

[ ] shall not be credited with Service for such period.

10. Vesting.

For purposes of vesting under Section 6.4 of the Plan, the Employer hereby elects the following Option:

[ ] Option A

Years of Service	Vested Percentage	Forfeited Percentage
less than 1	0%	100%
at least 1 but less than 2	10%	90%
at least 2 but less than 3	20%	80%
at least 3 but less than 4	30%	70%
at least 4 but less than 5	40%	60%
at least 5 but less than 6	50%	50%
at least 6 but less than 7	60%	40%
at least 7 but less than 8	70%	30%
at least 8 but less than 9	80%	20%
at least 9 but less than 10	90%	10%
10 or more	100%	0%

[ ] Option B

Years of Service	Vested Percentage	Forfeited Percentage
Less than 3	0%	100%
at least 3 but less than 4	20%	80%
at least 4 but less than 5	40%	60%
at least 5 but less than 6	60%	40%
at least 6 but less than 7	80%	20%
7 or more	100%	0%

[ ] Option C

Years of Service	Vested Percentage	Forfeited Percentage
less than 5	0%	100%
at least 5 but less than 6	50%	50%
at least 6 but less than 7	60%	40%
at least 7 but less than 8	70%	30%
at least 8 but less than 9	80%	20%
10 or more	100%	0%

[ ] Option D

Years of Service	Vested Percentage	Forfeited Percentage
Immediate 100% Vesting	100%	0%

[X] Option E

The Schedule indicated below (the sum of the Vested Percentage and Forfeited Percentage at each Year of Service must equal 100%) the vesting schedule must be at least as favorable as one of the safe harbor pre-ERISA schedules. The safe harbor vesting schedules are:

a. 15-year cliff vesting schedule: The plan provides that a participant is fully vested after 15 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service).

b. 20-year graded vesting schedule: The plan provides that a participant is fully vested based on a graded vesting schedule of 5 to 20 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service).

c. 20-year cliff vesting schedule for qualified public safety employees: The plan provides that a participant is fully vested after 20 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service). This safe harbor would be available only with respect to the vesting schedule applicable to a group in which substantially all of the participants are qualified public safety employees (within the meaning of Section 72(t)(10)(B)).

Years of Service	**Vested Percentage**	**Forfeited Percentage**
less than 1	**0%**	**100%**
at least 1 but less than 2	**20%**	**80%**
at least 2 but less than 3	**40%**	**60%**
at least 3 but less than 4	**60%**	**40%**
at least 4 but less than 5	**80%**	**20%**
5 or more	**100%**	**0%**

[ ] **Option F**
To comply with the Internal Revenue Service Regulations promulgated pursuant to the Code Section 3121(b)(7)(F), Participants who are part-time, seasonal or temporary Employees will have immediate vesting.
(If this Option F is elected, one of the other Options above must also be elected for Participants who are not part-time, seasonal or temporary Employees).

11. Participant Loans.
[X] Participant loans shall be offered pursuant to Section 6.14 of the Plan.
[ ] Participant loans shall not be offered.

12. Direct Transfer to Other Retirement Plan.
[ ] Direct transfer of a Participant's accounts to another defined contribution plan sponsored by the Employer is not permitted.
[X] The Accounts of any Participant who (i) is 100% vested in his Accounts in this Plan; (ii) has ceased to be eligible for participation in this Plan; and (iii) who becomes eligible for participation in another defined contribution retirement plan sponsored by the Employer (the "Other Retirement Plan"), shall be directly transferred to the Other Retirement Plan as soon as practicable after the Plan Administrator provides written direction to the Trustee to such effect in a form acceptable to the Trustee.

13. Valuation Date. Except with respect to any Special Valuation Date determined in accordance with Section 5.10, the Valuation Date for the Plan shall be on each business day of the Plan Year for which Plan assets are valued on an established market.

14. Determination of Vesting for City Manager. Any Participant in the position of City Manager for the City of Shawnee as of November 1, 2014, shall receive 100% immediate vesting in the Plan.

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15. The Employer has consulted with and been advised by its attorney concerning the meaning of the provisions of the Plan and the effect of entry into the Plan.

IN WITNESS WHEREOF the City of Shawnee has caused its corporate seal to be affixed hereto and this instrument to be duly executed in its name and behalf by its duly authorized officers this _____ day of _____, _____.

City of Shawnee

By:_____

Attest: Title:_____

_____

Title:_____

(SEAL)

The foregoing Joinder Agreement is hereby approved by the Oklahoma Municipal Retirement Fund this _____ day of _____, _____.

OKLAHOMA MUNICIPAL RETIREMENT FUND

By:_____

Title:_____

Attest:

_____
Secretary

(SEAL)

Required Disclosures. This Joinder Agreement is to be used only with the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan. Failure to properly complete this Joinder Agreement may result in failure of the Plan to qualify under Code Section 401(a). In accordance with IRS Rev. Proc. 2017-41, the Provider (as defined in Rev. Proc. 2017-41) who has obtained Internal Revenue Service approval of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan has authority under the Plan document to amend the Plan on behalf of adopting employers for certain changes in the Code, regulations, revenue rulings, other statements published by the Internal Revenue Service, including model, sample or other required good faith amendments. The Provider will inform adopting employers of any such amendments or of the discontinuance or abandonment of the Pre-Approved Plan document. The name, address and telephone number of the Provider is: McAfee & Taft A Professional Corporation, 211 N. Robinson, Oklahoma City, OK 73102, telephone (405) 552-2231. Any inquiries by the adopting employer regarding the adoption of the Plan, the meaning of Plan provisions, or the effect of the Internal Revenue Service advisory letter on the Pre-Approved Plan may be directed to the Provider.

Reliance on Sponsor Opinion Letter. The Provider has obtained from the IRS an Opinion Letter (as defined in Rev. Proc. 2017-41) specifying the form of this Joinder Agreement and the basic plan document satisfy, as of the date of the Opinion Letter, Code §401. An adopting Employer may rely on the Preapproved Plan Sponsor's IRS Opinion Letter only to the extent provided in Rev. Proc. 2017 41. The Employer may not rely on the Opinion Letter in certain other circumstances or with respect to certain qualification requirements, which are specified in the Opinion Letter and in Rev. Proc. 2017 41 or subsequent guidance. In order to have reliance in such circumstances or with respect to such qualification requirements, the Employer must apply for a determination letter to Employee Plans Determinations of the IRS.

Regular Board of Commissioners **7.**

Meeting Date: 04/04/2022

Ordinance

Submitted By: Kacie Eck, City Clerk

Department: City Clerk

Information

Title of Item for Agenda

Consideration and possible action of an ordinance regarding an amendment to the City of Shawnee Management Plan adopting the revised and restated OkMRF (Oklahoma Municipal Retirement Fund) Master Defined Contribution Retirement Plan.

Attachments

Memo

Ordinance

Joinder Agreement

Human Resources

16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: March 25, 2022

To: City Commission

From: Jennifer Greenland, HR Director

Subject: Consideration and Possible Action on Ordinance Regarding an Amendment to the City of Shawnee City Management Plan Adopting the Revised and Restated OkMRF Master Defined Contribution Retirement Plan

Background: Full-time, non-union employees participate in the Oklahoma Municipal Retirement Fund (OkMRF). The Commission is the governing body for the Shawnee Plans.

Shawnee has two types of plans, Defined Benefit (DB) and Defined Contribution (DC). The DC includes the City of Shawnee City Management Plan included in this agenda item.

OkMRF must follow a six-year filing cycle for preapproved plans in order to retain plan qualification and obtain a determination letter from the IRS. The IRS identified the plan as acceptable under Internal Revenue Code Section 401. The OkMRF Board approved the Amended and Restated Defined Contribution Master Plan and Joinder Agreement during their meeting in December 2021. The governing body now needs to approve and adopt the documents for our plan.

A summary of material changes was created by John A. Paphronis with McAfee & Taft.

Financial Impact: None

Attachment: Summary of Material Changes, IRS determination letter, and Master Plan

Staff Recommendation: Approval of the item.

McAFEE & TAFT
A PROFESSIONAL CORPORATION

8TH FLOOR • TWO LEADERSHIP SQUARE
211 NORTH ROBINSON • OKLAHOMA CITY, OK 73102-7103
(405) 235-9621 • FAX (405) 235-0439
www.mcafeetaft.com

MEMORANDUM

TO: Oklahoma Municipal Retirement Fund

FROM: McAfee & Taft A Professional Corporation
(John A. Papahronis)

DATE: November 12, 2021

RE: Oklahoma Municipal Retirement Fund Master Defined Contribution Plan and Joinder Agreement—Summary of Material Changes

The following summary compares the current version of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan and Joinder Agreement with the version recently approved by the Internal Revenue Service:

A. Master Defined Contribution Plan

Sec.	Feature	Current Version	Newly-Approved Version
1.1	Purpose	States the purpose of the Plan.	Adds IRS required sentence that the plan is intended to qualify as a governmental plan.
1.3	Exclusive Benefit	None	Added IRS required language that the Plan is for the exclusive benefit of employees. Expanded language that was previously in 1.1.
2.1(m)	Definition of Compensation	Includes historical language required by IRS	Deletes historical IRS required language that is obsolete.
2.1(r)	Definition of Employee	None	Includes a definition of Employee by cross referencing Joinder Agreement.
4.5	Change of Rate of Voluntary Nondeductible Contributions	Permits Participant to change rate of payroll deduction	Deletes reference to minimum and maximum rates.

4.8(d)(i)(3)	Roth Elective Deferrals	Provisions describing permitted Roth Elective Deferrals	Added IRS required language regarding correction of excess contributions of Roth Elective Deferrals.
5.11(a)(iv)	Maximum Permissible Amount	Definition for IRS limit	Updated IRS dollar limit for current amount.
6.12	Loss of Benefits for Cause	Reserved Section holder	Deleted per request of IRS.
6.17	Forfeiture of Benefits	Reserved Section holder	Deleted per request of IRS.
8.5	Provider's Power to Amend	Authority of Volume Submitter Practitioner to Amend for Adopting Employers	Modified to reflect current IRS terminology in accordance with Rev. Proc. 2017-41.
10.5	Benefits Payable to Incompetents	Protocol for benefit payments to incompetents	Modified to provide payments will be made to valid power of attorney, court appointed guardian, or other person authorized under state law.
11.11	Supersession of Inconsistent Provisions	Incorporates provisions of Trust Indenture	IRS required deletion of incorporation of provisions of Trust Indenture.

B. Joinder Agreement

Sec.	Feature	Current Version	Newly-Approved Version
8.	Forfeitures	Timing of allocation of forfeitures not specified	Timing of allocation specified
Sig. page	Required Disclosure re: IRS Approval	IRS required disclosure regarding the use and restrictions of IRS Preapproved Plan	Update language to meet current IRS requirements

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

TAX EXEMPT AND
GOVERNMENT ENTITIES
DIVISION

Plan Description: Non-Standardized Pre-Approved Profit Sharing Plan With CODA
FFN: 317D1080001-001 Case: 201800527 EIN: 73-0781676
Letter Serial No: Q702320a
Date of Submission: 12/18/2018

MCAFEE & TAFT
211 NORTH ROBINSON
TWO LEADERSHIP SQUARE, 10TH FLOOR
OKLAHOMA CITY, OK 73102

Contact Person:
Janell Hayes
Telephone Number:
513-975-6319
In Reference To: TEGE:EP:7521
Date: 06/30/2020

Dear Applicant:

In our opinion, the form of the plan identified above is acceptable for use by employers for the benefit of their employees under Internal Revenue Code (IRC) Section 401.

We considered the changes in qualification requirements in the 2017 Cumulative List of Notice 2017-37, 2017-29 Internal Revenue Bulletin (IRB) 89. Our opinion relates only to the acceptability of the form of the plan under the IRC. We did not consider the effect of other federal or local statutes.

You must provide the following to each employer who adopts this plan:
. A copy of this letter
. A copy of the approved plan
. Copies of any subsequent amendments including their dates of adoption
. Direct contact information including address and telephone number of the plan provider

Our opinion on the acceptability of the plan's form is a determination as to the qualification of the plan as adopted by a particular employer only under the circumstances, and to the extent, described in Revenue Procedure (Rev. Proc.) 2017-41, 2017-29 I.R.B. 92. The employer who adopts this plan can generally rely on this letter to the extent described in Rev. Proc. 2017-41. Thus, Employee Plans Determinations, except as provided in Section 12 of Rev. Proc. 2020-4, 2020-01 I.R.B. 148 (as updated annually), will not issue a determination letter to an employer who adopts this plan. Review Rev. Proc. 2020-4 to determine the eligibility of an adopting employer, and the items needed, to submit a determination letter application. The employer must also follow the terms of the plan in operation.

Except as provided below, our opinion doesn't apply to the requirements of IRC Sections 401(a)(4), 401(l), 410(b), and 414(s). Our opinion doesn't apply to IRC Sections 415 and 416 if an employer maintains or ever maintained another qualified plan for one or more employees covered by this plan. For this purpose, we will not consider the employer to have maintained another defined contribution plan provided both of the following are true:
. The employer terminated the other plan before the effective date of this plan
. No annual additions have been credited to any participant's account under the other plan as of any date within the limitation year of this plan

Also, for this purpose, we'll consider an employer as maintaining another defined contribution plan, if the employer maintains any of the following:
. A welfare benefit fund defined in IRC Section 419(e), which provides post-retirement medical benefits allocated to separate accounts for key employees as defined in IRC Section 419A(d)

. An individual medical account as defined in IRC Section 415(l)(2), which is part of a pension or annuity plan maintained by the employer
. A simplified employee pension plan

Our opinion doesn't apply to Treasury Regulations Section 1.401(a)-1(b)(2) requirements for a money purchase plan or target benefit plan where the normal retirement age under the employer's plan is lower than age 62.

Our opinion doesn't constitute a determination that the plan is an IRC Section 414(d) governmental plan. This letter is not a ruling with respect to the tax treatment to be given contributions which are picked up by the governmental employing unit within the meaning of IRC Section 414(h)(2).

Our opinion doesn't constitute a determination that the plen is an IRC Section 414(e) church plan.

Our opinion may not be relied on by a non-electing church plan for rules governing pre-ERISA participation and coverage.

Our opinion applies to the requirements of IRC Section 410(b) if 100 percent of all non-excludable employees benefit under the plan.

Employers who choose a safe harbor allocation formula and a safe harbor compensation definition may also rely on this opinion letter for the non-discriminatory amounts requirement under IRC Section 401(a)(4).

If this plan includes a cash or deferred arrangement (CODA) or otherwise provides for contributions subject to IRC Sections 401(k) and/or 401(m), the employer may rely on the opinion letter regarding the form of the non-discrimination tests of IRC Sections 401(k)(3) and 401(m)(2), if the employer uses a safe harbor compensation definition. For plans described in IRC Sections 401(k)(12) or (13) and/or 401(m)(11) or (12), employers may rely on the opinion letter regarding whether the plan's form satisfies the requirements of those sections unless the plan provides for the safe harbor contribution to be made under another plan. For SIMPLE plans described in IRC Sections 401(k)(11) and 401(m)(10), employers may also rely on the opinion letter regarding whether the plan's form satisfies the requirements of those sections.

The provisions of this plan override any conflicting provision contained in the trust or custodial account documents used with the plan, and an adopting employer may not rely on this letter to the extent that provisions of a trust or custodial account that are a separate portion of the plan override or conflict with the provisions of the plan document. This opinion letter does not cover any provisions in trust or custodial account documents.

An employer who adopts this plan may not rely on this letter when:
. the plan is being used to amend or restate a plan of the employer which was not previously qualified
. the employer's adoption of the plan precedes the issuance of the letter
. the employer doesn't correctly complete the adoption agreement or other elective provisions in the plan
. the plan is not identical to the pre-approved plan (that is, the employer has made amendments that cause the plan not to be considered identical to the pre-approved plan, as described in Section 8.03 of Rev. Proc. 2017-41)

Our opinion doesn't apply to what is contained in any documents referenced outside the plan or adoption agreement, if applicable, such as a collective bargaining agreement.

Our opinion doesn't consider issues under Title I of the Employee Retirement Income Security Act (ERISA) which are administered by the Department of Labor.

If you, the pre-approved plan provider, have questions about the status of this case, you can call the telephone number at the top of the first page of this letter. This number is only for the provider's use.

Individual participants or adopting eligible employers with questions about the plan should contact you.

You must include your address and telephone number on the pre-approved plan or the plan's adoption agreement, if applicable, so that adopting employers can contact you directly.

If you write to us about this plan, provide your telephone number and the best time to call if we need more information. Whether you call or write, refer to the letter serial number and file folder number at the top of the first page of this letter.

Let us know if you change or discontinue sponsorship of this plan.

Keep this letter for your records.

Sincerely Yours,

Khin M. Chow

Khin M. Chow
Director, EP Rulings & Agreements

Letter 6186 (June-2020)
Catalog Number 72434C

Exhibit B

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN

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ARTICLE I.
Purpose and Organization

1.1 **Purpose**: The purpose of this Plan is to encourage the loyalty and continuity of service of the Participants, to provide retirement benefits for all eligible Employees of the Employer, as hereinafter defined, who complete a period of faithful service and become eligible hereunder, and to qualify the Plan under Section 401(a) of the Code. It is intended that the Plan satisfy Section 401(a) of the Code by meeting the requirements of Section 414(d) of the Code. The benefits provided by this Plan will be paid from a Fund established by the Employer and will be in addition to the benefits Employees are entitled to receive under any other programs of the Employer and from the Federal Social Security Act.

The design type of this Plan is a profit sharing plan. To the extent this Plan is a governmental retiree benefit plan under Section 401(a)(24) of the Code, and prior to the termination of the Plan and satisfaction of all liabilities of the Plan, no part of the corpus or income of the Fund shall be used for, or diverted to, purposes other than for the exclusive benefit of the Plan participants and their beneficiaries.

1.2 **Parties**: The Oklahoma Municipal Retirement Fund hereby adopts and establishes this Plan for the benefit of Employees of those Employers, as defined herein, formed, chartered or incorporated under the laws of the State of Oklahoma, who wish to adopt it by executing a Joinder Agreement which incorporates this Plan by reference.

1.3 **Exclusive Benefit:** This Plan and the separate related Fund forming a part hereof are established and shall be maintained for the exclusive benefit of the eligible Employees of the Employer and their beneficiaries. Except as provided under Section 11.12, the Employer does not have any beneficial interest in any asset of the Fund and no part of any asset in the Fund may ever revert to or be repaid to the Employer, either directly or indirectly; nor, prior to the satisfaction of all liabilities with respect to the Participants and their Beneficiaries under the Plan, may any part of the corpus or income of the Fund, or any asset of the Fund, be (at any time) used for, or diverted to, purposes other than the exclusive benefit of the Participants or their Beneficiaries and for defraying reasonable expenses of administering the Plan.

ARTICLE II.
Definitions and Construction

2.1 **Definitions**: Where the following words and phrases appear in this Plan, they shall have the respective meanings set forth below, unless their context clearly indicates to the contrary:

(a) Account: One or more of several records maintained to record the interest in the Plan of each Participant and Beneficiary, and shall include any or all, where appropriate, of the following: (i) Municipality Contribution Account, (ii) Participant Deductible Contribution Account, (iii) Participant Deferred Compensation Contribution Account, (iv) Participant Mandatory Contribution Account, (v) Participant Nondeductible Contribution Account, (vi) Participant Roth Contribution Account, (vii) Pick-Up Contribution Account, (viii) Participant Rollover Account, (ix) Catch-Up Contribution Account, and (x) Loan Account.

(b) Adjustment Factor: The cost of living adjustment factor prescribed by the Secretary of the Treasury under Section 415(d) of the Code for years beginning after December 31, 1987, as applied to such items and in such manner as the Secretary shall provide.

(c) Amount(s) Forfeited: That portion of a terminated Participant's Municipality Contribution Account to which such Participant is not entitled because of insufficient Service.

(d) Authorized Agent: The City Clerk of the Employer or such other person designated by the Employer to carry out the efficient operation of the Plan at the local level.

(e) Authorized Leave of Absence: Any absence authorized by the Employer under the Employer's standard personnel practices applied to all persons under similar circumstances in a uniform manner, including any required military service during which a Participant's re-employment rights are protected by law; provided that he resumes employment with the Employer within the applicable time period established by the Employer or by law.

(f) Beneficiary: Any person or entity designated or deemed designated by a Participant as provided in Section 6.11 hereof.

(g) Break in Service: The expiration of ninety (90) days from the date the Participant last performed Service for the Employer for which such Participant was entitled to wages as defined in Section 3121(a) of the Code unless the Participant is on Authorized Leave of Absence. If a Participant does not resume employment with the Employer upon the expiration of an Authorized Leave of Absence, the Participant will be deemed to be absent from work on the first day of his Authorized Leave of Absence for purposes of determining if the Participant has a Break in Service.

For determining the amounts to be forfeited from a Participant's account under Section 6.6, any periods of employment with the Employer during which the Participant was not considered an Employee under the Plan shall not be considered as a Break in Service that causes a forfeiture unless the Participant was covered under a state retirement system or any other program outside the Oklahoma Municipal Retirement Fund System.

(h) Catch-Up Contributions: A Participant's contributions described in Section 4.8(c) herein.

(i) Catch-Up Contribution Account: The Account maintained for a Participant in which any Catch-Up Contributions are recorded.

(j) City Council: The City Council or Board of Trustees of the Employer or other duly qualified and acting governing authority of the Employer.

(k) Code: The Internal Revenue Code of 1986, as amended from time to time.

(l) Committee: The City Council of the Municipality, which shall act as the Plan Administrator of the Plan as provided for under Article X hereof.

(m) Compensation: Compensation means wages for federal income tax withholding purposes, as defined under Code §3401(a), plus all other payments to an Employee in the course of the Employer's trade or business, for which the Employer must furnish the Employee a written statement under Code §§6041, 6051 and 6052, but determined without regard to any rules that limit the remuneration included in wages based on the nature or location of the employment or services performed (such as the exception for agricultural labor in Code §3401(a)(2)). The Employer in Section 4 of its Joinder Agreement may specify modifications to the definition of Compensation, for purposes of contribution allocations under the Plan. For purposes of determining a Participant's compensation, any election by such Participant to reduce his regular cash remuneration under Code Sections 125, 401(k), 414(h), 403(b) or 457 shall be disregarded.

(1) Limitations. The annual compensation of each Participant taken into account in determining allocations for any Plan Year beginning after December 31, 2001, shall not exceed $280,000, as adjusted for cost-of-living increases in accordance with Section 401(a)(17)(B) of the Code. Annual compensation means compensation during the Plan Year or such other consecutive 12-month period over which compensation is otherwise determined under the Plan (the determination period). The cost-of-living adjustment in effect for a calendar year applies to annual compensation for the determination period that begins with or within such calendar year. If compensation for a period of less than 12 months is used for a plan year, then the otherwise applicable compensation limit is reduced in the same proportion as the reduction in the 12-month period. If a determination period consists of fewer than 12 months, the annual compensation limit will be multiplied by a fraction, the numerator of which is the number of months in the determination period, and the denominator of which is 12.

If Compensation for any prior determination period is taken into account in determining an Employee's benefits accruing in the current Plan Year, the Compensation for that prior determination period is subject to applicable annual compensation limit in effect for that prior determination period.

For limitation years beginning on and after January 1, 2001, for purposes of applying the limitations described in this Subsection 2.1(m), Compensation paid or made available during such limitation years shall include elective amounts that are not includible in the gross income of the Employee by reason of Section 132(f)(4) of the Code.

(n) Deductible Participant Contribution: Prior to January 1, 1987, the amount a Participant may voluntarily contribute to the Plan which could not exceed the lesser of $2,000 (or such higher limit as allowed by the Code), or 100% of Compensation, and is deductible from gross income by the Participant pursuant to the Code. No Deductible Participant Contributions may be made after January 1, 1987.

(o) Deferred Compensation Contributions: A Participant's contributions described in Section 4.8 herein and credited to his Participant Deferred Compensation Contribution Account.

(p) Disability: A physical or mental condition which, in the judgment of the Committee, totally and presumably permanently prevents a Participant from engaging in any substantial gainful employment with the Employer. A determination of such disability shall be based upon competent medical evidence.

(q) Effective Date: The later of: (a) the date specified in the Joinder Agreement; or (b) the first day on which the Plan has a Participant.

(r) Employee: Shall have the meaning set forth in Section 2 of the Joinder Agreement.

(s) Employer: A Municipality chartered, incorporated or formed under the laws of the State of Oklahoma which executes the Joinder Agreement.

(t) Employment Commencement Date: The first day of the first pay period during which the Participant receives wages as defined in Section 3121(a) of the Code from the Employer.

(u) Entry Date: The date an Employee becomes a Participant.

(v) Forfeiture: The portion of a Participant's Accounts which becomes forfeitable pursuant to Section 6.6 hereof.

(w) Fund: The fund established to provide the benefits under the Plan for the exclusive benefit of the Participants included in the Plan, and which will be pooled with similar funds of other incorporated cities and towns of Oklahoma as a part of the Oklahoma Municipal Retirement Fund, for purposes of pooled management and investment.

(x) Investment Manager: A person who is either (i) registered as an investment adviser under the Investment Advisers Act of 1940, (ii) a bank, as defined in the Investment Advisers Act of 1940, or (iii) an insurance company qualified to perform investment management services under the laws of more than one state.

(y) Investment Options: Any of those investment options selected by the Committee in accordance with Section 5.12 hereof.

(z) Joinder Agreement: The agreement by which the Employer adopts this Plan and Fund as its Plan and Fund.

(aa) Leased Employee: Any person (other than an employee of the recipient) who pursuant to an agreement between the recipient and any other person ("leasing organization") has performed services for the recipient (or for the recipient and related persons determined in accordance with Section 414(n)(6) of the Code) on a substantially full time basis for a period of at least one year, and such services are performed under primary direction or control by the recipient. Contributions or benefits provided a Leased Employee by the leasing organization which are attributable to services performed for the recipient employer shall be treated as provided by the recipient employer.

A Leased Employee shall not be considered an employee of the recipient if: (I) such employee is covered by a money purchase pension plan providing: (1) a nonintegrated employer contribution rate of at least 10% of compensation, as defined in Section 415(c)(3) of the Code, but including amounts contributed pursuant to a salary reduction agreement which are excludable from the employee's gross income under Section 125, Section 402(e)(3), Section 402(h)(1)(B) or Section 403(b) of the Code, (2) immediate participation, and (3) full and immediate vesting; and (ii) leased employees do not constitute more than 20% of the recipient's nonhighly compensated work force.

(bb) Limitation Year: The twelve (12) consecutive month period ending on June 30th of each year. If the Limitation Year is amended to a different twelve (12) consecutive month period, the new Limitation Year must begin on a date within the Limitation Year in which the amendment is made.

(cc) Loan Account: A Participant's Separate Account established in the event he desires to make a loan from his applicable Account as provided in Section 6.13 herein.

(dd) Mandatory Contributions: Contributions, if elected by the Employer in the Joinder Agreement, which Participants are required to make in order to participate in the Plan.

(ee) Municipality: (1) each and every incorporated municipality in the State of Oklahoma; (2) public trusts having municipalities as a beneficiaries; (3) interlocal cooperatives created pursuant to 74 Oklahoma Statutes, Sections 1001, et seq., between municipalities and/or their public trust, and; (4) any other legal entity comprising a municipal authority as that term is used in Chapter 48 of Title 11 Oklahoma statutes, which has adopted the Plan and/or which has become a participant in the related trust according to the terms herein.

(ff) Municipality Contribution Account: The account maintained for a Participant in which his share of the contributions of the Employer and the Amounts Forfeited and any adjustments relating thereto are recorded.

(gg) Normal Retirement Date: The first day of the month occurring on or next following the date a Participant attains sixty-five (65) years of age.

(hh) Oklahoma Municipal Retirement Fund: The trust created in accordance with Sections 48-101 et seq., of Title 11, Oklahoma Statutes 1981, to combine pension and retirement funds in incorporated cities and towns of Oklahoma for purposes of management and investment, represented by and acting through its Board of Trustees.

(ii) Participant: Any Employee or former Employee who meets the eligibility requirements and is covered under the Plan.

(jj) Participant Contribution Accounts: All of the following Accounts: (i) Participant Deductible Contribution Account, (ii) Participant Deferred Compensation Contribution Account, (iii) Participant Nondeductible Contribution Account, (iv) Catch-Up Contribution Account, (v) Pick-Up Contributions Account, (vi) Participant Mandatory Contributions Account, (vii) Participant Rollover Account, and (viii) Participant Roth Contribution Account.

(kk) Participant Deductible Contribution Account: The Account maintained for a Participant in which his Deductible Participant Contributions and adjustments relating thereto are recorded.

(ll) Participant Deferred Compensation Contribution Account: The Account maintained for a Participant in which his Deferred Compensation Contributions resulting from the Participant's election under Section 4.8 of the Plan and adjustments thereto are recorded.

(mm) Participant Mandatory Contribution Account: The Account maintained for a Participant in which his Mandatory Contributions and adjustments relating thereto are recorded.

(nn) Participant Nondeductible Contribution Account: The Account maintained for a Participant in which his voluntary nondeductible contributions and adjustments relating thereto are recorded.

(oo) Participant Rollover Account: The Account maintained for a Participant in which any Rollover Contributions are recorded.

(pp) Participant Roth Contribution Account: The Account maintained for a Participant in which any Roth Contributions are recorded.

(qq) Participation: The period commencing as of the date an Employee became a Participant and ending on the date the final distributions of all the Account balances are made.

(rr) Period(s) of Service or Service:

(1) A Participant's last continuous period during which the Participant was an Employee of the Employer and/or any other Municipality prior to the earlier of his Retirement or Break in Service.

(i) Service includes employment with a Municipality other than the Employer prior to the time that the other Municipality adopted the Plan if the other Municipality credits a participant's past service under its retirement plan; and

(ii) Service for the Employer does not include employment with any Municipality if that service would not be included under the Municipality's Plan.

(2) Concurrent employment with more than one Municipality shall be credited as only one period of service.

(3) Any Authorized Leave of Absence shall not be considered as interrupting continuity of employment, provided the Employee returns within the period of authorized absence. Until such time as the City Council shall adopt rules to the contrary, credit for Service with the Employer shall be granted for any period of Authorized Leave of Absence during which the Employee's full Compensation is continued and contributions to the Fund are continued at the same rate and made by or for him, but credit for Service with the Employer shall not be granted for any period of authorized, nonpaid absence due to illness, union leave, military service, or any other reason, unless arrangements are made with the City Council for the Employee's continued participation and for contributions to be continued at the same rate and made by him or on his behalf during such absence. Provided, however, if a Participant is on an Authorized Leave of Absence and is receiving worker's compensation during such Authorized Leave of Absence, and if the Employer so elects in the Joinder Agreement, such Participant shall be credited with Service for such period for purposes of vesting only (and not for purposes of allocation of Employer Contributions).

(4) The expiration of the term of office of an elected official shall not be considered as interrupting continuity of employment, provided the official is re-elected for a consecutive term.

(5) Any reference in this Plan to the number of years of Service of a Participant shall include fractional portions of a year.

(6) With respect to a Participant who was previously 100% vested in any other Municipality's qualified retirement plan prior to becoming a Participant in this Plan, such Participant's "Service" for purposes of determining years of service for vesting under this Plan shall include the Participant's last continuous period during which the Participant was an employee of the other Municipality.

(ss) Pick-Up Contributions: The Employer's contributions described in Section 4.7 hereof and credited to his Pick-Up Contribution Account.

(tt) Pick-Up Contributions Account: The account maintained for a Participant in which his share of Pick-Up Contributions are recorded.

(uu) Plan: The Oklahoma Municipal Retirement Fund Master Defined Contribution Plan set forth herein, and all subsequent amendments.

(vv) Plan Administrator: The persons who administer the Plan pursuant to the provisions of Article X hereof.

(ww) Plan Year: Means the twelve (12) consecutive month period ending June 30th of each year. The initial or final Plan Year may be less than a twelve (12) consecutive month period.

(xx) Previous Plan: The terms and provisions in the prior instruments governing the Employer's qualified defined contribution retirement plan and related trust, and applying before the Effective Date hereof, or any other date expressly specified herein if different from the Effective Date, which prior instruments are amended, restated and superseded by this instrument.

(yy) Retirement: Termination of employment upon a Participant's attaining age 65.

(zz) Roth Contributions: A Participant's contributions described in Section 4.8(d) herein and credited to his Participant Roth Contribution Account.

(aaa) Trust Service Provider: The person appointed by the Trustee to supervise operation of the Oklahoma Municipal Retirement Fund and to assist participating Municipalities in the adoption and operation of the Plan.

(bbb) Trustee: The Trustees appointed pursuant to the Trust Indenture establishing the Oklahoma Municipal Retirement Fund.

(ccc) Valuation Date: The date specified in Section 13 of the Joinder Agreement and any Special Valuation Dates determined in accordance with Section 5.10.

(ddd) Valuation Period: The period of time between two successive Valuation Dates.

2.2 **Construction**: The masculine gender, where appearing in the Plan, shall be deemed to include the feminine gender, unless the context clearly indicates to the contrary. The words "hereof," "herein," "hereunder" and other similar compounds of the word "herein" shall mean and refer to the entire Plan, not to any particular provision or section.

ARTICLE III.
Eligibility and Participation

3.1 **Eligibility**: An Employee, as defined in the Joinder Agreement, who has satisfied all the requirements set forth in the Joinder Agreement shall be eligible to participate in the Plan. Any person who has been classified by the Employer as an independent contractor and has had his compensation reported to the Internal Revenue Service on Form 1099 but who has been reclassified as an "employee" (other than by the Employer) shall not be considered as an eligible Employee who can participate under this Plan; provided, if the Employer does reclassify such worker as an "Employee," for purposes of this Plan, such reclassification shall only be prospective from the date that the Employee is notified by the Employer of such reclassification.

3.2 **Entry Date**: The participation of an Employee eligible to become a Participant shall commence on the earliest date permitted by the Employer in the Joinder Agreement.

3.3 **Re-employment of Former Participants**: Subject to Section 3.4, if a Participant incurs a Break in Service and is subsequently re-employed by the Employer, the Participant shall not receive any credit for his previous Period of Service with the Employer and such Participant shall be treated in the same manner as a person who has not previously been employed by any Municipality.

3.4 **Re-employment of Retired or Fully Vested Participants**: If a retired or fully vested Participant is re-employed by the Employer, no distributions shall be made from the Plan during the period of such re-employment. Periods of Service prior to such Participant's retirement or termination of service, as applicable, shall count as Periods of Service for purposes of determining such Participant's vested interest in his Municipality Contribution Account.

ARTICLE IV.
Contributions

4.1 **Contributions by Employer**: The Employer shall make such contributions as set forth in the Joinder Agreement. Such contributions shall be made from the operating revenue of the current taxable year or from accumulated revenue or surplus, as appropriate. The contribution shall be determined by written action of the Employer stating the amount of such contribution, and by the payment of such stated amount to the Trustee monthly. Upon execution of the Joinder Agreement, the Employer will contribute one Dollar ($1.00) to establish the Fund. Any Participant who received Compensation from the Employer during the Valuation Period shall share in the Employer's contribution for the Valuation Period, even if not employed on the last day of the Valuation Period.

All Participant contributions shall be transmitted monthly to the Trustee after being withheld by the Employer. The Trustee shall hold all such contributions, subject to the provisions of the Plan and Fund, and no part of these contributions shall be used for, or diverted to, any other purpose.

4.2 **Required Participant Contributions**: If the Employer so elects in the Joinder Agreement, Participants shall not be required to contribute to the Plan.

4.3 **Mandatory Contributions**: If the Employer so elects in the Joinder Agreement, a Participant shall contribute to the Plan for each Plan Year the percentage of his Compensation set forth in the Joinder Agreement. Mandatory Contributions shall be made by payroll deductions. The Participant shall authorize such deductions in writing on forms approved by, and filed with, the Committee.

4.4 **Voluntary Nondeductible Contributions by Participants**: Subject to the limitations of Sections 5.11 and to such rules of uniform application as the Committee may adopt, each Participant may elect to make nondeductible contributions to the Plan. The contributions of such Participant after the Effective Date may be by payroll deduction, which the Participant shall authorize the Employer to make on written authorization forms designated by and filed with the Committee, or by cash payments by such Participant to the Trustee. The authorization to make contributions by payroll deductions shall be effective on the first day following the Committee's receipt of the payroll deduction authorization. In addition, a Participant may make Rollover Contributions notwithstanding the percentage limitations in the first sentence of this Section or the cash payment requirement of the second sentence of this Section.

4.5 **Change of Rate of Voluntary Nondeductible Contributions by Participant**: The Participant may change his rate of payroll deduction at any time, or he may discontinue his payroll deductions at any time. Any change of rate or discontinuance of payroll deductions shall be effective on the first payday following the receipt of written notice thereof by the Committee; provided, however, that not more than one change or discontinuance shall be made within a calendar month unless otherwise stated by the Committee.

The Participant must furnish the Committee at the time of any Participant Contribution or payroll deduction authorization an election designating the contribution as a Mandatory Contribution, Deductible Participant Contribution, or a Voluntary Nondeductible Contribution.

4.6 **Participant Contributions Nonforfeitable**: Each Participant who contributes hereunder shall have a nonforfeitable vested interest in that portion of the value of his own contributions not theretofore previously withdrawn by him.

4.7 **Pick-Up Contributions**: If the Employer elects in Section 5 of the Joinder Agreement, all Participants shall be required as a condition of employment to make the contributions specified in the Joinder Agreement. These contributions shall be picked up and assumed by the Employer and paid to the Fund in lieu of contributions by the Participant. Such contributions shall be designated as Employer contributions for federal income tax purposes. Each Participant's Compensation will be reduced by the amount paid to the Fund by the Employer in lieu of the required contribution by the Participant. These contributions shall be excluded from the Participant's gross income for federal income tax purposes and from wages for purposes of withholding under Sections 3401 through 3404 of the Code in the taxable year in which contributed. No Participant shall have the option of receiving the contributed amounts directly as Compensation. Contributions made by the Employer under this election shall be designated as Participant contributions for purposes of vesting, determining Participant rights and Participant Compensation. [In order for the Employer to have reliance on whether the Pick-Up Contributions comply with Section 414(h)(2) of the Code, the Employer must obtain a private letter ruling from the Internal Revenue Service.]

4.8 **Deferred Compensation Contributions**: If the Employer elects in the Joinder Agreement and if such Employer adopted a cash or deferred feature before May 7, 1986, the following provisions shall apply:

(a) Deferred Compensation Contributions under Code Section 401(k): A Participant, by written notice to the Plan Administrator, may elect to make a Deferred Compensation Contribution to the Plan rather than receive Compensation to which the Participant would otherwise be entitled during the period immediately following such election.

Subject to the limitations of this Section 4.8 and Section 5.11, a Participant's Deferred Compensation Contribution may be any whole percentage of his Compensation, but in no case shall a Participant's Deferred Compensation Contribution election exceed the percentage set forth in the Joinder Agreement. Such election shall be binding until the Participant, by written notice to the Plan Administrator, modifies or discontinues his Deferred Compensation Contribution. A Participant's initial election, or modification or discontinuance shall be effective as soon as administratively practicable following the Plan Administrator's receipt of the Participant's written notice of election, modification or discontinuance, and shall remain in effect until modified or terminated. Provided, not more than one change or discontinuance shall be made within a calendar month unless otherwise stated by the Committee.

Employer contributions made pursuant to this Section 4.8 shall be credited to the Participant's Participant Deferred Compensation Account. All such Employer contributions shall

be paid to the Trustee as soon as practicable following the retention of such amounts by the Employer from the Participant's Compensation.

(b) Dollar Limitation on Deferred Compensation Contributions:

(i) General Rule. No Participant shall be permitted to make Deferred Compensation Contributions during any calendar year in excess of the dollar limitation contained in Section 402(g) of the Code (including, if applicable, the dollar limitation on Catch-Up Contributions defined in Section 414(v) of the Code) in effect as of the beginning of the taxable year as adjusted under Section 402(g)(4) of the Code (hereafter referred to as "Excess Elective Deferrals"). In the case of a Participant who is age 50 or over by the end of the taxable year, the dollar limitation described in the preceding sentence includes the amount of Deferred Compensation Contributions that can be Catch-Up Contributions. In the event a Catch-Up Contribution eligible Participant makes Excess Elective Deferrals, the Plan Administrator shall cause such Participant's Deferred Compensation Contributions to be recharacterized as Catch-Up Contributions to the extent necessary to either (i) exhaust his Excess Elective Deferrals, and/or (ii) increase his Catch-Up Contributions to the applicable limit under Section 414(v) of the Code for the Plan Year.

(ii) Recharacterization to Meet Limits of Section 402(g) of the Code. In the event a Participant's Deferred Compensation Contributions for a Plan Year do not equal the maximum Contributions that may be made under the Plan during that Plan Year for any reason, the Participant's Catch-Up Contributions for such Plan Year shall be recharacterized as Deferred Compensation Contributions for all purposes to the extent necessary to increase his Deferred Compensation Contributions to equal such maximum for such Plan Year.

(iii) Corrective Distributions.

a. **General**. Notwithstanding any other provision of the Plan to the contrary, Excess Elective Deferrals (remaining after recharacterization as discussed above) and income and loss allocable thereto for the applicable calendar year must be distributed no later than April 15 following the calendar year in which Excess Elective Deferrals are incurred to avoid penalty, to Participants who have Excess Elective Deferrals for the preceding calendar year. Provided that, Excess Elective Deferrals to be distributed for a taxable year will be reduced by Excess Contributions previously distributed for the Plan Year beginning in such taxable year. For years beginning after 2005, distribution of Excess Elective Deferrals for a year shall be made first from the Participant's Account holding Deferred Compensation Contributions, to the extent Deferred Compensation Contributions were made for the year, unless the Participant specifies otherwise.

b. **Calculation of Income Allocable to Excess Elective Deferrals**. The Plan Administrator shall use the method provided in Section 5.6 herein for computing the income allocable to corrective distributions pursuant to this Section. Excess Elective Deferrals are determined on a date that is no more than seven (7) days before the distribution. For the Plan Year beginning in 2007, income or loss allocable to the period between the end of the taxable year and the

date of distribution ("gap period") must be taken into account for corrective distributions. For Plan Years beginning after 2007, income or loss applicable to the gap will not be taken into account for corrective distributions.

(c) Catch-up Contributions: For Plan Years beginning after December 31, 2001, all Employees who are eligible to make Deferred Compensation Contributions under this Plan and who have attained age 50 before the close of the Employee's taxable year shall be eligible to make Catch-Up Contributions in accordance with, and subject to the limitations of, Section 414(v) of the Code. Catch-Up Contributions are Deferred Compensation Contributions made to the Plan that are in excess of an otherwise applicable Plan limit and that are made by Participants who are age 50 or over by the end of their taxable years. An otherwise applicable Plan limit is a limit in the Plan that applies to Deferred Compensation Contributions without regard to Catch-Up Contributions, such as the limit on Annual Additions and the Code Section 402(g) limit. Such Catch-Up Contributions shall not be taken into account for purposes of the provisions of the Plan implementing the required limitations of Sections 402(g) and 415 of the Code. The Plan shall not be treated as failing to satisfy the provisions of the Plan implementing the requirements of Section 401(k)(3), 401(k)(11), 401(k)(12), 410(b), or 416 of the Code, as applicable, by reason of the making of such Catch-Up Contributions.

(d) Roth Elective Deferrals:

(i) General Application.

(1) If elected by the Employer in the Joinder Agreement, this Subsection (d) will apply to Contributions beginning with the effective date specified in the adoption agreement but in no event before the first day of the first taxable year beginning on or after January 1, 2006.

(2) As of the effective date under Subsection (1), the Plan will accept Roth elective deferrals made on behalf of Participants. A Participant's Roth elective deferrals will be allocated to a separate account maintained for such deferrals as described in Subsection (ii).

(3) Unless specifically stated otherwise, Roth elective deferrals will be treated as elective deferrals for all purposes under the Plan. Roth elective deferrals that are determined to be excess elective deferrals shall be corrected by distribution in the manner set forth in Section 4.8.

(ii) Separate Accounting.

(1) Contributions and withdrawals of Roth elective deferrals will be credited and debited to the Roth elective deferral account maintained for each Participant.

(2) The Plan will maintain a record of the amount of Roth elective deferrals in each Participant's account.

(3) Gains, losses, and other credits or charges must be separately allocated on a reasonable and consistent basis to each Participant's Roth elective deferral account and the Participant's other accounts under the Plan.

(4) No contributions other than Roth elective deferrals and properly attributable earnings will be credited to each Participant's Roth elective deferral account.

(iii) Direct Rollovers.

(1) Notwithstanding Section 9.5, a direct rollover of a distribution from a Roth elective deferral account under the Plan will only be made to another Roth elective deferral account under an applicable retirement plan described in § 402A(e)(1) or to a Roth IRA described in Code Section 408A, and only to the extent the rollover is permitted under the rules of Code Section 402(c).

(2) Notwithstanding Section 9.5, if elected by the Employer in the Joinder Agreement, the Plan will accept a rollover contribution to a Roth elective deferral account only if it is a direct rollover from another Roth elective deferral account under an applicable retirement plan described in Code Section 402A(e)(1) and only to the extent the rollover is permitted under the rules of Code Section 402(c).

(3) The Plan will not provide for a direct rollover (including an automatic rollover) for distributions from a Participant's Roth elective deferral account if the amount of the distributions that are eligible rollover distributions are reasonably expected to total less than $200 during a year. In addition, any distribution from a Participant's Roth elective deferral account is not taken into account in determining whether distributions from a Participant's other accounts are reasonably expected to total less than $200 during a year. However, eligible rollover distributions from a Participant's Roth elective deferral account are taken into account in determining whether the total amount of the Participant's account balances under the Plan exceeds $1,000 for purposes of mandatory distributions from the plan.

(iv) Definition.

(1) **Roth Elective Deferrals**. A Roth elective deferral is an elective deferral that is:

a. Designated irrevocably by the Participant at the time of the cash or deferred election as a Roth elective deferral that is being made in lieu of all or a portion of the pre-tax elective deferrals the Participant is otherwise eligible to make under the plan; and

b. Treated by the Employer as includible in the Participant's income at the time the Participant would have received that amount in cash if the Participant had not made a cash or deferred election.

ARTICLE V.
Accounting, Allocation and Valuation

5.1 **Accounts**: The Committee shall maintain a separate Municipality Contribution Account, Participant Nondeductible Contribution Account, Participant Mandatory Contribution Account, Participant Deductible Contribution Account, Participant Rollover Account, Participant Deferred Compensation Contribution Account, Catch-Up Contribution Account, Pick-Up Contributions Account and Loan Account as necessary for each Participant. A separate sub-account for each such Account shall be maintained for each Investment Option offered in accordance with Section 5.12. All such Accounts shall be credited or debited as herein provided.

5.2 **Eligibility for Allocation**: Employer contributions together with Amounts Forfeited as of the Valuation Date shall be allocated to the Municipality Contribution Accounts of Participants.

5.3 **Allocation of Contribution**: The Employer contributions, together with Amounts Forfeited as of the prior Valuation Date shall be allocated in the manner elected by the Employer in the Joinder Agreement.

5.4 **Allocation of Amounts Forfeited**: No Amount Forfeited attributable to the contribution of one Employer adopting this Plan may be allocated for the benefit of Participants of the Plan of any other adopting Employer.

5.5 **Value of Account**: The value of a Participant's Account is equal to the sum of all contributions, earnings or losses, and other additions credited to the Account, less all distributions (including distributions to Beneficiaries and to alternate payees and also including disbursement of Plan loan proceeds), forfeitures, expenses and other charges against the Account as of a Valuation Date or other relevant date. For purposes of a distribution under the Plan, the value of a Participant's Account balance is its value as of the Valuation Date immediately preceding the date of the distribution. The value of a Participant's Account is the fair market value of the assets in the account.

5.6 **Allocation of Investment Earnings and Losses**: As of each Valuation Date, the Accounts will be adjusted to reflect the earnings and losses since the last Valuation Date. Earnings or losses will be allocated using the daily valuation method so that earnings or losses will be allocated on each day of the Plan Year for which Plan assets are valued on an established market.

5.7 **Accounting for Participants' Contributions**: Contributions by or on behalf of each Participant shall be credited to his Participant Nondeductible Contribution Account, Participant Mandatory Contribution Account, Participant Deductible Contribution Account, Catch-Up Contribution Account, Pick-Up Contribution Account, or Participant Deferred Compensation Contribution Account as deposited with the Trustee.

5.8 **Accounting for Statement of Account**: As soon as is administratively feasible, the Committee shall present to each Participant a statement of such Participant's Accounts, at least annually, showing the balances at the beginning of the reported period, any changes during the reported period, the balances at the end of the reported period, and such other information as the Committee may determine. However, neither the maintenance of accounts, the allocations to

Accounts, nor the statements of account shall operate to vest in any Participant any right or interest in or to the Fund except as the Plan specifically provides herein.

5.9 **Time of Adjustment**: Each adjustment required by this Article V shall be deemed to have been made at the times specified in this Article V, regardless of the dates of actual entries or receipts by the Trustee of contributions for such Plan Year.

5.10 **Special Valuation Date**: If the Committee determines that a substantial change in the value of any Investment Fund has occurred since the last Valuation Date, the Committee may, prior to the next Valuation Date, establish one or more Special Valuation Dates and determine the adjustment required to make the total net credit balance in the Accounts of the then Participants equal to the then market value of the total assets of the Fund. Such adjustments shall be made consistent with the procedure specified in Section 5.5. Having determined such adjustment, all distributions which are to be made as of or after such special Valuation Date, but prior to the next succeeding Valuation Date or Special Valuation Date, shall be made as if the net credit balances in all Accounts had actually been credited or debited to reflect the adjustment provided by this Section.

5.11 **Limitation on Allocation of Employer Contributions**: The following provisions will be applicable in determining if the Plan and the Employer contributions thereto satisfy the requirements of Section 415 of the Code and the regulations thereunder. Except to the extent permitted under Section 4.8(c) of this Plan and Section 414(v) of the Code, if applicable, the Annual Additions that may be contributed or allocated to a Participant's Accounts under the Plan for any limitation year shall not exceed the Maximum Permissible Amount.

(a) Definitions: For the purposes of this Section the following definitions shall be applicable:

(i) Annual Additions: For purposes of the Plan, "Annual Additions" shall mean the amount allocated to a Participant's Account during the Limitation Year that constitutes:

(1) Employer contributions,

(2) Employee Deferred Compensation Contributions or Roth Contributions (excluding excess deferrals that are distributed in accordance with Treas. Reg. § 1.402(g)-1(e)(2) or (3)),

(3) Forfeitures, and

(4) Amounts allocated to an individual medical account, as defined in Section 415(1)(2) of the Code, which is part of a pension or annuity plan maintained by the Employer are treated as annual additions to a defined contribution plan; and amounts derived from contribution plans or accrued after December 31, 1985, and taxable years ending after such date, which are attributable to post-retirement medical benefits, allocated to the separate account of a key employee, as defined in Section 419(A)(d)(3) of the Code, under a welfare benefit fund, as defined in Section 419(e) of the Code, maintained by the Employer are treated as annual addition to a defined contribution plan.

Annual additions for purposes of Code § 415 shall not include restorative payments. A restorative payment is a payment made to restore losses to a Plan resulting from actions by a fiduciary for which there is reasonable risk of liability for breach of a fiduciary duty under federal or state law, where participants who are similarly situated are treated similarly with respect to the payments. Generally, payments are restorative payments only if the payments are made in order to restore some or all of the Plan's losses due to an action (or a failure to act) that creates a reasonable risk of liability for such a breach of fiduciary duty (other than a breach of fiduciary duty arising from failure to remit contributions to the Plan). This includes payments to a plan made pursuant to a court-approved settlement, to restore losses to a qualified defined contribution plan on account of the breach of fiduciary duty (other than a breach of fiduciary duty arising from failure to remit contributions to the Plan). Payments made to the Plan to make up for losses due merely to market fluctuations and other payments that are not made on account of a reasonable risk of liability for breach of a fiduciary duty are not restorative payments and generally constitute contributions that are considered annual additions.

Annual additions for purposes of Code § 415 shall not include: (1) The direct transfer of a benefit or employee contributions from a qualified plan to this Plan; (2) rollover contributions (as described in Code §§ 401(a)(31), 402(c)(1), 403(a)(4), 403(b)(8), 408(d)(3), and 457(e)(16)); (3) repayments of loans made to a participant from the Plan; and (4) repayments of amounts described in Code § 411(a)(7)(B) (in accordance with Code § 411(a)(7)(C)) and Code § 411(a)(3)(D), as well as Employer restorations of benefits that are required pursuant to such repayments.

If, in addition to this Plan, the Participant is covered under another qualified plan which is a defined contribution plan maintained by the Employer, a welfare benefit fund, as defined in Section 419(e) of the Code maintained by the Employer, or an individual medical benefit account, as defined in Section 415(1)(2) of the Code maintained by the Employer, which provides for Annual Additions during any Limitation Year, then the Annual Additions which may be credited to a Participant's Account under this Plan for any such Limitation Year will not exceed the Maximum Permissible Amount reduced by the Annual Additions credited to a Participant's Account under the other plans and welfare benefit funds for the same Limitation Year. If the Annual Additions with respect to the Participant under other defined contribution plans and welfare benefit plans maintained by the Employer are less than the Maximum Permissible Amount and the Employer contribution that would otherwise be contributed or allocated to the Participant's Account under this Plan would cause the Annual Additions for the Limitation Year to exceed this limitation, the amount contributed or allocated will be reduced so that the Annual Additions under all such plans and funds for the Limitation Year will equal the Maximum Permissible Amount. If the Annual Additions with respect to the Participant under such other defined contribution plans and welfare benefit funds in the aggregate are equal to or greater than the Maximum Permissible amount, no excess amount will be contributed or allocated to a Participant's Account under this Plan for the Limitation Year.

(ii) Actual Compensation: The words "Actual Compensation" shall mean a Participant's wages, salaries, and fees for professional services and other amounts received without regard to whether or not an amount is paid in cash for personal services actually rendered in the course of employment with the Employer, to the extent that the amounts are includible in gross income (or to the extent amounts deferred at the election of the Employee

would be includible in gross income but for the rules of Sections 125, 132 (for limitation years beginning after December 31, 2001), 402(e)(3), 402(h)(1)(B), 402(k), or 457(b) of the Code). These amounts include, but are not limited to, commissions paid salesmen, compensation for services on the basis of a percentage of profits, commissions on insurance premiums, tips and bonuses, fringe benefits, and reimbursements or other expense allowances under a nonaccountable plan as described in Treas. Reg. §1.62-2(c)). For years beginning after December 31, 2008, (i) an individual receiving a differential wage payment, as defined by Code §3401(h)(2), is treated as an employee of the employer making the payment, (ii) the differential wage payment is treated as Actual Compensation, and (iii) the Plan is not treated as failing to meet the requirements of any provision described in Code §414(u)(1)(C) by reason of any contribution or benefit which is based on the differential wage payment.

For purposes of applying the limitations described in this Section 5.11 of the Plan, Compensation paid or made available during such limitation years shall include elective amounts that are not includable in the gross income of the Employee by reason of Code Section 132(f)(4).

Actual Compensation shall be adjusted, as set forth herein, for the following types of compensation paid after a Participant's severance from employment with the Employer maintaining the Plan (or any other entity that is treated as the Employer pursuant to Code § 414(b), (c), (m) or (o)). However, amounts described in Subsections (a) and (b) below may only be included in Actual Compensation to the extent such amounts are paid by the later of 2½ months after severance from employment or by the end of the limitation year that includes the date of such severance from employment. Any other payment of compensation paid after severance of employment that is not described in the following types of compensation is not considered Actual Compensation within the meaning of this Section, even if payment is made within the time period specified above.

(1) **Regular Pay:** Actual Compensation shall include regular pay after severance of employment if:

A. The payment is regular compensation for services during the Participant's regular working hours, or compensation for services outside the Participant's regular working hours (such as overtime or shift differential), commissions, bonuses, or other similar payments; and

B. The payment would have been paid to the Participant prior to a severance from employment if the Participant had continued in employment with the Employer.

(2) **Leave Cashouts and Deferred Compensation:** Leave cashouts shall not be included in Actual Compensation. In addition, deferred compensation shall be included in Actual Compensation.

(3) **Salary Continuation Payments for Disabled Participants:** Actual Compensation does not include compensation paid to a Participant who is permanently and totally disabled (as defined in Code § 22(e)(3)).

(iii) Excess Amount: The words "Excess Amount" shall mean the excess of the Participant's Annual Additions for the applicable Limitation Year over the Maximum Permissible Amount.

(iv) **Maximum Permissible Amount**: The words "Maximum Permissible Amount" shall mean for the applicable Limitation Year, the "maximum permissible amount" (except for Employee Catch-Up Contributions under Section 414(v) of the Code) which may be contributed or allocated to or made with respect to any Participant which amount shall be the lesser of:

(1) $56,000, as adjusted for cost-of-living under Code Section 415(d) the "Defined Contribution Dollar Limitation," or

(2) 100% of the Participant's Actual Compensation for the Limitation Year.

The compensation limitation referred to above shall not apply to: any contribution for medical benefits (within the meaning of Section 419A(f)(2) of the Code) after separation from service which is otherwise treated as an Annual Addition, or any amount otherwise treated as an Annual Addition under Section 415(1)(1) of the Code.

(b) Determination of Excess: If an excess amount was allocated to a Participant on an allocation date of this Plan which coincides with an allocation date of another plan, the excess amount attributed to this Plan will be the product of (1) the total excess amount allocated as of such date times (2) the ratio of (i) the Annual Additions allocated to the Participant for the Limitation Year as of such date under this Plan to (ii) the total Annual Additions allocated to the Participant for the Limitation Year as of such date under this and all other qualified plans which are defined contribution plans.

(c) Treatment of Excess: Notwithstanding any provision of the Plan to the contrary, if the annual additions (within the meaning of Code § 415) are exceeded for any participant, then the Plan may be able to correct such excess in accordance with the Employee Plans Compliance Resolution System (EPCRS) as set forth in Revenue Procedure 2018-52 or any superseding guidance, including, but not limited to, the preamble of the final § 415 regulations. However, EPCRS may not be available in all situations.

5.12 **Investment Options**:

(a) Self-Directed: If the Employer elects in the Joinder Agreement, each Participant in the Plan is hereby given the specific authority to direct the investment of all or any portion of his Accounts in one or more Investment Options provided under this Plan in accordance with the procedures established by the Committee. If a Participant does not designate an Investment Option for his Accounts, his Accounts will be invested in the age-based balanced fund or such other Investment Option as may be designated by the Trustees. For purposes of this Section, the Participants shall be exercising full investment control, discretion, authority and fiduciary responsibility as provided in this Plan of the investments in such Participants' applicable Accounts.

(b) Non-Self-Directed: If the Employer does not elect in the Joinder Agreement to allow self-directed investments, all Accounts will be invested in the Balanced Fund or such other Investment Option as may be designated by the Trustees.

ARTICLE VI.
Benefits

6.1 **Retirement or Disability:** If a Participant's employment with the Employer is terminated when he attains age sixty-five (65), or if a Participant's employment is terminated at an earlier age as the result of a Disability, he shall be entitled to receive the entire amount of his Municipality Contribution Account.

6.2 **Deferred Retirement:** If a Participant, with the consent of the Employer, shall continue in active employment following his Normal Retirement Date, he shall continue to participate under the Plan. Upon actual retirement, such Participant shall be entitled to receive the entire amount of his Municipality Contribution Account as of his actual retirement date.

6.3 **Death of a Participant:** Upon the death of a Participant, his Beneficiary shall be entitled to receive the entire amount of his Municipality Contribution Account and Participant Contribution Accounts as of the date of his death. In the case of a death occurring on or after January 1, 2007, if a Participant dies while performing qualified military service (as defined in Code § 414(u)), the survivors of the Participant are entitled to any additional benefits (other than benefit accruals relating to the period of qualified military service) provided under the Plan as if the Participant had resumed and then terminated employment on account of death.

6.4 **Termination for Other Reasons - Vested Percentage:** If a Participant's employment with the Employer is terminated before his Normal Retirement Date for any reason other than Disability or death, he shall be entitled to an amount equal to the vested percentage of his Municipality Contribution Account. Such vested percentage shall be determined as of the date of termination in accordance with the election of the Employer in the Joinder Agreement.

6.5 **Initial Distribution Date:** The date of initial distribution ("Initial Distribution Date") of a Participant whose employment is terminated and provided that the Participant requests a distribution, shall be as soon as practicable following his termination of employment and he shall be entitled to the vested percentage of his Accounts on such Initial Distribution Date payable in accordance with the provisions of Section 6.10. The portion of the Employer's contribution, the Amounts Forfeited or the periodic adjustment which is allocated to a Participant terminated for the reasons specified in Section 6.4 after such Initial Distribution Date shall be payable in accordance with the method utilized under Section 6.10 as soon as practicable.

6.6 **Determination of Amounts Forfeited:** Upon a distribution pursuant to Section 6.4 or if the Participant incurs a Break in Service, the forfeited percentage of a Participant's Municipality Contribution Account, if any, shall be deducted from the Participant's Account. Such Amounts Forfeited shall become available for allocation in accordance with Item 8 of the Joinder Agreement as of the end of the calendar quarter following the Valuation Period in which the terminated Participant forfeited such amounts.

6.7 **Participant Contribution Accounts:** A Participant shall be fully vested in his Participant Contribution Accounts at all times. A Participant's Contribution Account balances shall be paid to him in connection with the distribution to him of the vested portion of his

Municipality Contribution Account on or after his Initial Distribution Date. Such distributions shall be made in accordance with Section 6.10 and Section 6.8.

6.8 **Withdrawals from Participant's Contribution Accounts:** In accordance with the provisions hereof, a Participant may withdraw all or any part of his Participant Contribution accounts by filing a written application with the Administrator. Such withdrawal shall be effective no sooner than thirty (30) (unless waived by the Participant) but not later than ninety (90) days after the Participant's receipt from the Plan Administrator of a rollover notice required by Code Section 402(f). A Participant who withdraws all or part of his Participant Contribution Account balances shall not forfeit his proportionate share of net income, gains and profits, if any, for the Valuation Periods previously allocated to his Participant Contribution Accounts, nor any portion of his Municipality Contribution Account but the Participant's Contribution Accounts shall not share (to the extent of any withdrawals) in any net income for the Valuation Period in which the withdrawal occurs. For any distribution notice issued in Plan Years beginning after December 31, 2006, any reference to the 90-day maximum notice period prior to distribution in applying the notice requirements of Code §§402(f) (the rollover notice), or 411(a)(11) (Participant's consent to distribution) will become 180 days.

(a) Participant Deductible Contribution Account: If allowed in the Joinder Agreement, a Participant may withdraw all or any part of his Participant Deductible Contribution Account (but not to exceed the amount in his Participant Deductible Contribution Account at the time of withdrawal) by filing a written application with the Plan Administrator. Such withdrawal may be made no more often than once a year. If at the time of the withdrawal the Participant has not attained age 59½ or is not disabled, the Participant will be subject to a federal income tax penalty unless such withdrawal is rolled over to a qualified plan or individual retirement account within sixty (60) days of the date of distribution.

(b) Participant Nondeductible Contribution Account: A Participant may withdraw all or any part of his Participant Nondeductible Contribution Account by filing a written application with the Plan Administrator.

(c) Participant Deferred Compensation Contribution Account: Notwithstanding any other provision of this Plan, no amount in a Participant's Deferred Contribution Account may be distributed to a Participant earlier than such Participant's retirement, death, Disability, or severance from employment. The above distribution requirements shall be strictly interpreted by the Plan Administrator to conform with the requirements of Section 401(k) of the Code and future amendments or Internal Revenue Service interpretations thereof. If a Participant is allowed to withdraw from his Participant Deferred Compensation Contribution Account, the provisions of the first paragraph of this Section 6.8 shall apply to such withdrawals. Notwithstanding the foregoing, for purposes of Code §401(k)(2)(B)(i)(I), effective January 1, 2009, an individual is treated as having been severed from employment during any period the individual is performing service in the uniformed services described in Code §3401(h)(2)(A). If an individual elects to receive a distribution by reason of severance from employment, death or disability, the individual may not make an elective deferral or Employee contribution during the 6-month period beginning on the date of the distribution.

(d) Pick-up Contribution Account: Notwithstanding any other provision of this Plan, no amount in a Participant's Pick-Up Contribution Account may be distributed to a Participant earlier than such Participant's retirement, death, Disability, or separation from service. If a Participant is allowed to withdraw from his Pick-Up Contribution Account, the provisions of the first paragraph of this Section 6.8 shall apply.

6.9 **Withdrawals from Participant's Mandatory Contribution Account:** A Participant may not withdraw any portion of his Participant Mandatory Contribution Account prior to the termination of his employment. Such account balances will be paid at the same time and in the same manner as such Participant's Municipality Contribution Account.

6.10 **Methods of Distribution:** On and after each Participant's Initial Distribution Date, after all adjustments to his Accounts required as of such date shall have been made, distribution of his share shall be made to or for the benefit of the Participant or, in case of his death, to or for the benefit of his Beneficiary, by one of the following methods, as determined by the Committee:

(a) a lump sum distribution;

(b) an installment distribution consisting of approximately equal installments for a term not exceeding ten (10) years;

(c) an installment distribution consisting of approximately equal installments for a term not extending beyond the joint life expectancy (as calculated in accordance with Income Tax Regulation section 1.72-9) on the Initial Distribution Date of the Participant and his spouse;

(d) periodic distributions as designated by the Participant or Beneficiary; or

(e) purchase of an annuity.

Commencement of payments under the method of distribution selected shall be as of the initial Distribution Date of the Participant, provided that for administrative convenience, such commencement may be delayed as reasonably necessary but in no event for more than sixty (60) days after a reasonable time for all administrative calculations, allocations and accounting operations necessary to determine the amount of the distribution. The Committee, in its sole discretion, may accelerate the payment of any unpaid installments. If a former Participant receiving installment payments dies prior to the receipt by him of the full amount to be paid to him from his Participant Accounts, the remaining installments shall be paid to his Beneficiary. Under no circumstance may a method of payment be elected that would be expected to cause more than fifty percent (50%) of the present value of any series of payments to go to a person other than the Participant.

6.11 **Designation of Beneficiary:** Each Participant shall designate his Beneficiary on a form provided by the Committee and such designation may include primary and contingent Beneficiaries. If Participant designates more than one Beneficiary, each shall share equally unless the Participant specifies a different allocation. The designation may be changed at any time by filing a new form with the Committee. In the absence of such written designation, the surviving spouse, if any, of the Participant shall be deemed to be the designated Beneficiary, and otherwise the estate of such Participant. Further, the written designation of the Participant's spouse may be voided upon divorce of the Participant if required by applicable state law. In all events, the date of determination of a Participant's Beneficiary shall be the date of death of a

Participant. Production of a certified copy of the death certificate of any Participant or other persons shall be sufficient evidence of death, and the Committee shall be fully protected in relying thereon.

6.12 **Payments Under a Qualified Domestic Relations Order:**

(a) The Municipality shall follow the terms of any "Qualified Domestic Relations Order" as defined in Subsection (b) below issued with respect to a Participant where such Qualified Domestic Relations Order grants to an "Alternate Payee" rights in the benefit of the Participant.

(b) The term "Qualified Domestic Relations Order" means an order issued by the District Court of the State of Oklahoma pursuant to the domestic relations laws of the State of Oklahoma which relates to the provision of marital property rights to a spouse or former spouse of a Participant and which creates or recognizes the existence of an Alternate Payee's right to, or assigns to an Alternate Payee the right to receive a portion of the benefits payable with respect to a Participant of the Plan.

(c) To qualify as an Alternate Payee, a spouse or former spouse must have been married to the Participant for a period of not less than thirty (30) continuous months immediately preceding the commencement of the proceedings from which the Qualified Domestic Relations Order issues.

(d) A Qualified Domestic Relations Order is valid and binding on the Trustees and the Participant only if it meets the requirements of this Section.

(e) A Qualified Domestic Relations Order shall clearly specify:

1) the name, social security number, and last-known mailing address (if any) of the Participant, and the name and mailing address of the alternative payee covered by the order;

2) the amount or percentage of the Participant's benefits to be paid by the Plan to the Alternate Payee;

3) the characterization of the benefit as to marital property rights, and whether the benefit ceases upon the death or remarriage of the Alternate Payee; and,

4) each plan to which such order applies.

(f) A Qualified Domestic Relations Order meets the requirements of this Section only if such order:

1) does not require the Plan to provide any type or form of benefit, or any option not otherwise provided under the Plan;

2) does not require the Plan to provide increased benefits; and,

3) does not require the payment of benefits to an Alternate Payee which are required to be paid to another Alternate Payee pursuant to another order previously determined to be a Qualified Domestic Relations Order, or an order recognized by the Plan as a valid order prior to the effective date of the Plan.

(g) A Qualified Domestic Relations Order shall not require payment of benefits to an Alternate Payee prior to the actual retirement date or withdrawal of the related member.

(h) In the event a Qualified Domestic Relations Order requires the benefits payable to an Alternate Payee to terminate upon the remarriage of said Alternate Payee, the Plan shall terminate said benefit only upon the receipt of a certified copy of a marriage license, or a copy of a certified order issued by the Court that originally issued said Qualified Domestic Relations Order declaring the remarriage of said Alternate Payee.

(i) This Section of the Plan shall not be subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), 29 U.S.C.A. Section 1001, et seq., as amended from time to time, or rules and regulations promulgated thereunder, and court cases interpreting said Act.

(j) Effective on or after April 6, 2007, a domestic relations order that otherwise satisfies the requirements for a QDRO will not fail to be a QDRO: (i) solely because the order is issued after, or revises, another domestic relations order or QDRO; or (ii) solely because of the time at which the order is issued, including issuance after the annuity starting date.

(k) The Board of Trustees of the Oklahoma Municipal Retirement Fund shall promulgate such rules as are necessary to implement the provisions of this Section.

(l) An Alternate Payee who has acquired beneficiary rights pursuant to a valid Qualified Domestic Relations Order must fully comply with all provisions of the rules promulgated by the Trustees pursuant to this Section in order to continue receiving his or her benefits.

(m) Nothing in this Section shall grant a spouse or former spouse of a Participant any property rights in the benefits of any Participant except as specifically authorized for Qualified Domestic Relations Orders, and no spousal consent shall be required for a Participant to elect or change elections pertaining to a benefit payable under this Plan.

6.13 **Loans to Participants:**

(a) General: The Committee, in its sole discretion, may direct Trustees to make loans to Participants upon the written direction and application of the Participant who desires to effect such loan, up to 50% of the vested balance of a Participant's Accounts. All such loans (i) shall not be made available to Highly Compensated Employees (as defined in Section 414(q) of the Code) in an amount greater than the amount made available to other Employees, (ii) shall be available to all Participants on a nondiscriminatory basis, (iii) shall be made available in an amount equal to the lesser of 50% of the borrowing Participant's vested Benefit in his Account or $50,000, (iv) shall bear a reasonable rate of interest which will be established by the Committee, (v) shall be secured by the borrowing Participant's Benefit account balance attributable to his Account, (vi) shall be amortized and repaid in level payments of principal and

interest made not less frequently than monthly over the term of the loan, (vii) shall be repaid by payroll reduction while the Participant is employed; (viii) shall accelerate and be due in full on the date a Participant terminates employment with the Employer; (ix) shall not be less than $1,000 in amount each; and (x) shall be made upon such other reasonable terms which the Committee shall designate, such terms being applied in a nondiscriminatory fashion; provided, in no event shall any loan have a term in excess of five years. There shall not be more than one or two loans outstanding (as elected by the Employer) at any time with respect to a Participant. No Participant who has borrowed from the Plan may make another loan until the previous loan has been fully repaid. Outstanding loans are not subject to refinancing by a new loan. Upon direction by the Committee, and subject to Subsection (c) below, the Trustees may foreclose upon such Participant's interest in his Account in the event of default. A loan to a Participant, when added to the outstanding balance of all other loans to the Participant from the Plan and other plans sponsored by the Employer, cannot exceed $50,000, reduced by the excess of the highest outstanding balance of loans from the Plan (and all other plans sponsored by the Employer) during the one-year period ending on the day before the date the loan is made over the outstanding balance of the loans from the Plan on the date the loan is made. No distribution of a Benefit shall be made to any Participant, Beneficiary or the estate of a Participant unless and until all unpaid loans made by the Plan to such Participant together with accrued interest have been paid in full. In determining if any of the foregoing limitations regarding the making of loans to Participants, loans made under all other plans (i) sponsored by the Employer and (ii) qualified under Sections 401(a) and 501(a) of the Code will be considered. All costs and expenses of any loan will be charged to the applicable Accounts of the Participant.

(b) Establishment of Loan Account: At such time as it is determined that a Participant is to receive a loan from the Plan, the loan shall be made from the Participant's applicable Account in the order and precedence indicated hereafter and such amount shall be deemed to be credited to the Participant's Loan Account with a corresponding debit to occur to his Account: (i) first, an Account holding Employer contributions, including "rollover contributions" (other than Deferred Compensation Contributions, if applicable); (ii) second, an Account holding Deferred Compensation Contributions, if applicable; and (iii) third, an Account holding contributions picked up and assumed by the Employer pursuant to Section 4.7 of this Plan. All interest payments to be made pursuant to the terms and provisions of the loan shall be credited to the applicable Account in such a manner so that the Loan Account will reflect unpaid principal and interest from time to time. The earnings attributable to the Loan Account shall be allocable only to the Loan Account of such Participant and shall not be considered as general earnings of the Trust Fund to be allocated to the other Participants therein as provided herein. Other than for the limited purposes of establishing a separate account for the allocation of the interest thereto, a Participant's Loan Account shall, for all other purposes, be considered as part of his applicable Account.

(c) Foreclosure of Loan Account: The Trustees may foreclose upon such Participant's interest in his Account in the event of default under the loan made to the Participant under this Section.

(d) Special Restrictions on Foreclosure: In the event of default under a loan made under this Section, foreclosure under the promissory note evidencing such loan and attachment of the Participant's interest in his applicable Accounts shall occur within a reasonable time

following the event of default; provided, with respect to any portion of a loan secured by amounts governed under Section 401(k) of the Code, if applicable, foreclosure on such 401(k) amounts shall not occur until the occurrence of an event described under Section 401(k) of the Code which would otherwise permit a distribution to be made from the Plan.

(e) Establishment of Loan Program: The Trustees are hereby authorized and directed to establish a "loan program" (the "Loan Program") and the Trustees are further authorized to delegate to the Committee the duties and responsibilities with regard to the implementation of the Loan Program as adopted by the Trustees for and on behalf of the Plan. The Loan Program shall be considered to be a part of this Plan for the purposes stated in the Loan Program.

(f) Loan Account: The words "Loan Account" shall mean a Participant's separate Account established in the event he desires to make a loan from his applicable Account as provided in this Section 6.13.

6.14 **Required Minimum Distributions:** The provisions of this Section 6.14 will apply for purposes of determining Required Minimum Distributions for distribution calendar years beginning with the 2003 calendar year, as well as Required Minimum Distributions for the 2002 Distribution Calendar Years that are made on or after August 1, 2002. The requirements of this Section will take precedence over any inconsistent provisions of the Plan. All distributions required under this Section will be determined and made in accordance with the Treasury regulations under Section 401(a)(9) and the minimum distribution incidental benefit requirement of Section 401(a)(9)(G) of the Internal Revenue Code. Notwithstanding the other provisions of this Section, distributions may be made under a designation made before January 1, 1984, in accordance with Section 242(b)(2) of the Tax Equity and Fiscal Responsibility Act (TEFRA) and the provisions of the Plan that relate to Section 242(b)(2) of TEFRA.

(a) Limits on Distribution Periods: As of the first distribution calendar year, distributions, if not made in a single-sum, may only be made over one of the following periods (or a combination thereof): (1) the life of the participant; (2) the life of the participant and a designated beneficiary; (3) a period certain not extending beyond the life expectancy of the participant; or (4) a period certain not extending beyond the joint and last survivor expectancy of the participant and a designated beneficiary.

(b) Time and Manner of Distribution:

(i) Required Beginning Date. The Participant's entire interest will be distributed, or begin to be distributed, to the Participant no later than the Participant's Required Beginning Date. For purposes of this Section, the "Required Beginning Date" of a Participant is the April 1 of the calendar year following the later of the calendar year in which the Participant attains age 70½ or the calendar year in which the Participant retires.

(ii) Death of Participant Before Distributions Begin. If the Participant dies before distributions begin, the Participant's entire interest will be distributed, or begin to be distributed, no later than as follows:

(1) If the Participant's surviving spouse is the Participant's sole

designated Beneficiary, then, distributions to the surviving spouse will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died, or by December 31 of the calendar year in which the Participant would have attained age 70½, if later.

(2) If the Participant's surviving spouse is not the Participant's sole designated Beneficiary, then, distributions to the designated Beneficiary will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died.

(3) If there is no designated Beneficiary as of September 30 of the year following the year of the Participant's death, the Participant's entire interest will be distributed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(4) If the Participant's surviving spouse is the Participant's sole designated Beneficiary and the surviving spouse dies after the Participant but before distributions to the surviving spouse begin, this Subsection (ii), other than Subsection (ii)(1), will apply as if the surviving spouse were the Participant.

For purposes of this Subsection (ii) and Subsection (d), unless Subsection (ii)(1) applies, distributions are considered to begin on the Participant's Required Beginning Date. If Subsection (ii)(1) applies, distributions are considered to begin on the date distributions are required to begin to the surviving spouse under Subsection (ii)(4). If distributions under an annuity purchased from an insurance company irrevocably commence to the Participant before the Participant's Required Beginning Date (or to the Participant's surviving spouse before the date distributions are required to begin to the surviving spouse under Subsection (ii)(4)), the date distributions are considered to begin is the date distributions actually commence.

(iii) Forms of Distribution. Unless the Participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the Required Beginning Date, as of the first distribution calendar year distributions will be made in accordance with Subsections (c) and (d) of this Section. If the Participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder will be made in accordance with the requirements of Section 401(a)(9) of the Code and the Treasury regulations.

(c) Required Minimum Distributions During Participant's Lifetime:

(i) Amount of Required Minimum Distribution For Each Distribution Calendar Year. During the Participant's lifetime, the minimum amount that will be distributed for each distribution calendar year is the lesser of:

(1) the quotient obtained by dividing the Participant's Account balance by the distribution period in the Uniform Lifetime Table set forth in Section 1.401(a)(9)-9, Q&A-2, of the Treasury regulations, using the Participant's age as of the Participant's birthday in the distribution calendar year; or

(2) if the Participant's sole designated Beneficiary for the distribution calendar year is the Participant's spouse, the quotient obtained by dividing the Participant's Account balance by the number in the Joint and Last Survivor Table set forth in Section

1.401(a)(9)-9, Q&A-3, of the Treasury regulations, using the Participant's and spouse's attained ages as of the Participant's and spouse's birthdays in the distribution calendar year.

(ii) Lifetime Required Minimum Distributions Continue Through Year of Participant's Death. Required minimum distributions will be determined under this Subsection (c) beginning with the first distribution calendar year and up to and including the distribution calendar year that includes the Participant's date of death.

(d) Required Minimum Distributions After Participant's Death:

(i) Death On or After Date Distributions Begin.

(1) Participant Survived by Designated Beneficiary. If the Participant dies on or after the date distributions begin and there is a designated Beneficiary, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's Account balance by the longer of the remaining life expectancy of the Participant or the remaining life expectancy of the Participant's designated Beneficiary, determined as follows:

a. The Participant's remaining life expectancy is calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.

b. If the Participant's surviving spouse is the Participant's sole designated Beneficiary, the remaining life expectancy of the surviving spouse is calculated for each distribution calendar year after the year of the Participant's death using the surviving spouse's age as of the spouse's birthday in that year. For distribution calendar years after the year of the surviving spouse's death, the remaining life expectancy of the surviving spouse is calculated using the age of the surviving spouse as of the spouse's birthday in the calendar year of the spouse's death, reduced by one for each subsequent calendar year.

c. If the Participant's surviving spouse is not the Participant's sole designated Beneficiary, the designated Beneficiary's remaining life expectancy is calculated using the age of the Beneficiary in the year following the year of the Participant's death, reduced by one for each subsequent year.

(2) No Designated Beneficiary. If the Participant dies on or after the date distributions begin and there is no designated Beneficiary as of September 30 of the year after the year of the Participant's death, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's Account balance by the Participant's remaining life expectancy calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.

(ii) Death Before Date Distributions Begin.

(1) Participant Survived by Designated Beneficiary. If the Participant dies before the date distributions begin and there is a designated Beneficiary, the minimum amount that will be distributed for each distribution calendar year after the year of the

Participant's death is the quotient obtained by dividing the Participant's Account balance by the remaining life expectancy of the Participant's designated Beneficiary, determined as provided in Subsection (i).

(2) **No Designated Beneficiary**. If the Participant dies before the date distributions begin and there is no designated Beneficiary as of September 30 of the year following the year of the Participant's death, distribution of the Participant's entire interest will be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(3) **Death of Surviving Spouse Before Distributions to Surviving Spouse Are Required to Begin**. If the Participant dies before the date distributions begin, the Participant's surviving spouse is the Participant's sole designated Beneficiary, and the surviving spouse dies before distributions are required to begin to the surviving spouse under Subsection (b)(ii)(1), this Section 6.14(ii) will apply as if the surviving spouse were the Participant.

(e) Definitions:

(i) **Designated Beneficiary**. The individual who is designated as the Beneficiary under Section 6.11 of the Plan and is the designated Beneficiary under Section 401(a)(9) of the Internal Revenue Code and Section 1.401(a)(9)-4 of the Treasury regulations.

(ii) **Distribution Calendar Year**. A Calendar Year for which a minimum distribution is required. For distributions beginning before the Participant's death, the first Distribution Calendar Year is the calendar year immediately preceding the Calendar Year which contains the Participant's Required Beginning Date. For distributions beginning after the Participant's death, the first Distribution Calendar Year is the calendar year in which distributions are required to begin under Subsection (b)(ii). The Required Minimum Distribution for the Participant's first Distribution Calendar Year will be made on or before the Participant's Required Beginning Date. The Required Minimum Distribution for other Distribution Calendar Years, including the Required Minimum Distribution for the Distribution Calendar Year in which the Participant's Required Beginning Date occurs, will be made on or before December 31 of that distribution calendar year.

(iii) **Life Expectancy**. Life Expectancy as computed by use of the Single Life Table in Section 1.401(a)(9)-9, Q&A-1 of the Treasury regulations.

(iv) **Participant's Account Balance**. The Account Balance as of the last valuation date in the calendar year immediately preceding the distribution calendar year (valuation calendar year) increased by the amount of any contributions made and allocated or forfeitures allocated to the Account Balance as of dates in the valuation calendar year after the valuation date and decreased by distributions made in the valuation calendar year after the valuation date. The Account Balance for the valuation calendar year includes any amounts rolled over or transferred to the Plan either in the valuation calendar year or in the distribution calendar year if distributed or transferred in the valuation calendar year.

6.15 **Withdrawals from Participant Rollover Account:** A Participant may request and receive a distribution from his Participant Rollover Account at any time, even if he or she has not terminated employment, unless the rollover was from a defined benefit retirement plan sponsored by the Employer.

ARTICLE VII.
Notices

7.1 **Notice to Oklahoma Municipal Retirement Fund:** As soon as practicable after a Participant ceases to be in the employ of the Employer, the Committee shall give written notice to the Oklahoma Municipal Retirement Fund. The notice shall include such of the following information and directions as are necessary or advisable under circumstances:

(a) name and address of the Participant;

(b) reason he ceased to be in the Employer's employ;

(c) name and address of the Beneficiary or Beneficiaries in case of Participant's death;

(d) percentage or amount to which such Participant is entitled in case of termination of employment;

(e) time, manner and amount of payments to be made to such Participant; and

(f) information required to complete the Trustee's Withholding Election Form.

As soon as practicable after the Committee learns of the death of a Participant, it shall give like notice to the Oklahoma Municipal Retirement Fund.

7.2 **Subsequent Notices:** At any time and from time to time after giving the notice as provided for in Section 7.1, the Committee may modify such original notice or any subsequent notice by means of a further written notice or notices to the Oklahoma Municipal Retirement Fund, but any action taken or payments made by the Oklahoma Municipal Retirement Fund pursuant to a prior notice shall not be affected by a subsequent notice.

7.3 **Copy of Notice:** A copy of each notice provided for in Sections 7.1 and 7.2 shall be mailed by the Committee to the Participant or to each Beneficiary involved, as the case may be, but if, for any reason, such copy is not sent or received, that fact shall not affect the validity of any notice to the Oklahoma Municipal Retirement Fund nor the validity of any action taken or payment made pursuant thereto.

7.4 **Reliance Upon Notice:** Upon receipt of any notice as provided in this Article VII, the Oklahoma Municipal Retirement Fund shall promptly take whatever action and make whatever payments are called for therein, it being intended that the Oklahoma Municipal Retirement Fund may rely upon the information and directions in such notice absolutely and without question. However, the Oklahoma Municipal Retirement Fund may call to the attention of the Committee any error or oversight which the Oklahoma Municipal Retirement Fund believes to exist in any notice.

ARTICLE VIII.
Amendment and Termination

8.1 **Termination of Plan:** The Employer may at any time, effective as specified, terminate the Plan and may direct and require the Oklahoma Municipal Retirement Fund to liquidate the Fund. In the event the Employer shall for any reason cease to exist, the Plan shall terminate and the Fund shall be liquidated. In the event of the termination, partial termination, or complete discontinuance of contributions hereunder, the Account balances of each Participant will become nonforfeitable.

8.2 **Suspension and Discontinuance of Contributions:** If the governing body of the Employer decides it is impossible or inadvisable to continue to make contributions to the Plan, it shall have the power by appropriate resolution or decision to:

(a) suspend contributions to the Plan;

(b) discontinue contributions to the Plan; or

(c) terminate the Plan.

Suspension shall be a temporary cessation of contributions and shall not constitute or require a termination of the Plan. A discontinuance of contributions shall not constitute a formal termination of the Plan and shall not preclude later contributions but all Municipality Contribution Accounts not theretofore fully vested shall become fully vested in the respective Participants notwithstanding the provisions of Section 6.4. In such event, Employees who become eligible to enter the Plan subsequent to the discontinuance shall receive no benefits. After the date of a discontinuance of contributions, the Trust shall remain in existence as provided in this Section 8.2 and the provisions of the Plan and Trust shall remain in force. A certified copy of such decision or resolution shall be delivered to the Oklahoma Municipal Retirement Fund, and as soon as possible thereafter the Oklahoma Municipal Retirement Fund shall send or deliver to each Participant or Beneficiary concerned a copy thereof.

8.3 **Liquidation of Trust Fund:** Upon a complete termination or upon a partial termination of the Plan, unless the Employer's successor shall elect to continue the Plan, the Accounts of all Participants and Beneficiaries shall thereupon be and become fully vested. Upon a complete termination, the Oklahoma Municipal Retirement Fund shall convert the proportionate interest of such Participants and Beneficiaries in the Trust Fund to cash and, after deducting all charges and expenses, the Oklahoma Municipal Retirement Fund shall adjust the balances of such Accounts as provided in Section 5.5 treating the termination date as the current Valuation Date.

Thereafter, the Oklahoma Municipal Retirement Fund shall distribute as soon as administratively feasible the amount to the credit of each such Participant and Beneficiary as the Committee shall direct.

8.4 **Amendments:** Each Employer agrees to adopt any amendments to this Plan which are necessary for an initial or continued determination that the Plan is a qualified, tax exempt plan under Sections 401(a) and 501(a) of the Code. Any such amendments will be an amendment of the Employer's separate Plan if approved by the Trustee. The Employer may amend its separate

Plan in any respect and at any time, subject to the limitations of the Plan, by amendment of or addition to the Joinder Agreement. However, the Oklahoma Municipal Retirement Fund reserves the right to approve all Employer amendments.

8.5 **Provider's Power to Amend for Adopting Employers:** The Provider, as defined in section 4.08 of Rev. Proc. 2017-41, may amend any part of the Plan. However, for purposes of reliance on an Opinion Letter (as defined in Rev. Proc. 2017-41), the Provider will no longer have the authority to amend the Plan on behalf of the Employer as of the date (1) the Employer amends the Plan to incorporate a type of plan described in section 6.03 of Rev. Proc. 2017-41 that is not permitted under the Pre-Approved Plan program, or (2) the Internal Revenue Service notifies the Employer, in accordance with section 8.06(3) of Rev. Proc. 2017-41, that the Plan is an individually designed plan due to the nature and extent of Employer amendments to the Plan.

ARTICLE IX.
Employment Transfers

9.1 **Transfers from This Plan:**

(a) To Another Category with This Employer: If a Participant is employed by the Employer and is transferred to employment with this Employer but under another department, classification or category, so that he is no longer eligible to participate in this Plan, such participation shall thereupon cease and his Account balance shall remain in the Fund and will continue to accrue interest but he will not continue to accrue Service for the purpose of additional vesting credit for benefits under this Plan. However, if an Employee participates in any other plan sponsored by the Employer within the Fund, he or she will continue to accrue service under this Plan for vesting purposes only.

(b) To Another Municipality: If a Participant's employment by the Employer is terminated by virtue of his transfer to employment with another Municipality, his membership in this Plan shall thereupon cease and he shall be subject to the following rules and requirements relating to this Plan and his right and benefits hereunder, to-wit:

(i) if he is fully vested under this Plan as of the date of such employment transfer, he shall be entitled to take any distribution, full or partial, without any effect on his current vesting status; or

(ii) if he is not fully vested under this Plan as of the date of such employment transfer, and he is, immediately upon such transfer of employment, covered by the retirement system under which such other Municipality participates in the Oklahoma Municipal Retirement Fund, he will continue to accrue Service for the purpose of additional vesting credit for benefits under this Plan. However, upon any distribution (that would not be optional to an active Employee), full or partial, vesting will stop and any unvested balance, if any, will be forfeited.

9.2 **Transfers to This Plan:**

(a) From Another Category with This Employer: If a person becomes a Participant immediately upon his transfer from full-time, regular employment with this Employer under another department, classification or category where he is ineligible for membership only because of the type of such employment, his Service accrued by virtue of such prior employment shall not be counted in determining his vesting credit for benefits hereunder.

(b) From Another Municipality: If a person becomes a Participant immediately upon his transfer from full-time, regular employment with a Municipality other than this Employer, his Service accrued by virtue of such prior employment shall be counted in determining his vesting credit for benefits hereunder, and he shall also be subject to all the other provisions of this Plan. A Participant's eligibility for membership under this Plan will be determined by applying the eligibility requirements in the Joinder Agreement as though the date which his credited Service from the other Municipality began was his date of employment with this Employer. Service from such prior employment will however be ignored in its entirety upon any distribution from that Municipality, full or partial, if taken prior to its full vesting.

(c) **Previously Fully Vested With Another Municipality:** With respect to a Participant who was previously 100% vested in any other Municipality's qualified retirement plan prior to becoming a Participant in this Plan, such Participant's "Service" for purposes of determining years of service for vesting under this Plan shall include the Participant's last continuous period during which the Participant was an Employee of the other Municipality.

9.3 **Notice of Transfers:** Immediately after any transfer of employment referred to in Sections 9.1 or 9.2, the transferred Participant shall give written notice of such transfer to the Authorized Agent on a form furnished by the Authorized Agent. Such Participant shall not be penalized, however, for failure to give such notice. The Authorized Agent shall give immediate notice in writing of such transfers to the Trust Service Provider and the Committee.

9.4 **Transfer from Other Qualified Plans:** The Employer may cause to be transferred to the Oklahoma Municipal Retirement Fund all or any of the assets held in respect to any plan or trust which satisfied the applicable requirements of the Code relating to qualified plans and trusts, which is maintained by the Employer for the benefit of its Employees. Any such assets so transferred shall be accompanied by written instructions from the Employer, or the trustee or custodian or the individual holding such assets, setting forth the Participants for whose benefit such assets have been transferred and showing separately the respective contributions by the Employer and by the Participants and the current value of the assets attributable thereto. Upon receipt of such assets and instructions the Oklahoma Municipal Retirement Fund shall thereafter proceed in accordance with the provisions of the Fund.

9.5 **Rollover Contributions:** A Participant who is or was entitled to receive an eligible rollover distribution, as defined in Code Section 402(c)(4) and Treasury Regulations issued thereunder, from a qualified plan described in Section 401(a) or 403(a) of the Code (including after-tax employee contributions), an annuity contract described in Section 403(b) of the Code (including after-tax employee contributions, or an eligible plan under Section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state, or an individual retirement account may elect to contribute all or any portion of such distribution to the Trust directly from such qualified plan, annuity contract or eligible plan, or within 60 days of receipt of such distribution to the Participant. Rollover Contributions shall only be made in the form of cash, or, if and to the extent permitted by the Employer with the consent of the Trustee, promissory notes evidencing a plan loan to the Participant; provided, however, that Rollover Contributions shall only be permitted in the form of promissory notes if the Plan otherwise provides for loans.

The Committee shall develop such procedures and require such information from Participants as it deems necessary to ensure that amounts contributed under this Section 9.5 meet the requirements for tax-deferred rollovers established by this Section 9.5 and by Code Section 402(c). No Rollover Contributions may be made to the Plan until approved by the Committee.

If a Rollover Contribution made under this Section 9.5 is later determined by the Administrator not to have met the requirements of this Section 9.5 or of the Code or Treasury regulations, then, within a reasonable time after such determination is made, the amounts then held in the Trust attributable to such Rollover Contribution shall be distributed to the Employee.

A Participant's Rollover Contributions Account shall be subject to the terms of the Plan except as otherwise provided in this Section 9.5.

Notwithstanding any other provision of this Section 9.5, the Employer may direct the Trustee not to accept Rollover contributions.

9.6 **Transfer to Other Qualified Plans:** The Employer, by written direction to the Oklahoma Municipal Retirement Fund, may transfer some or all of the assets held under the Fund to another plan or trust meeting the requirements of the Code relating to qualified plans and trusts. In the case of any merger or consolidation with, or transfer of assets and liabilities to, any other plan, provisions shall be made so that each Participant in the Plan on the date thereof (if the Plan then terminated) would receive a benefit immediately after the merger, consolidation or transfer which is equal to or greater than the benefit he would have been entitled to receive immediately prior to the merger, consolidation or transfer (if the Plan had then terminated).

9.7 **Rollover to Another Plan or IRA:**

(a) General: Notwithstanding any provision of the Plan to the contrary that would otherwise limit a Distributee's election under this Section, a Distributee may elect, at the time and in the manner prescribed by the Committee, to have any portion of an Eligible Rollover Distribution paid directly to an Eligible Retirement Plan specified by the Distributee in a Direct Rollover. The Committee shall establish procedures for implementing such Direct Rollover distribution.

(b) Definitions: For purposes of this Section 9.7, the following definitions shall apply:

(i) "Eligible Rollover Distribution": An "Eligible Rollover Distribution" is any distribution of all or any portion of the balance to the credit of the Distributee, except that an Eligible Rollover Distribution does not include: any distribution that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the Distributee or the joint lives (or joint life expectancies) of the Distributee and the Distributee's designated Beneficiary, or for a specified period of 10 years or more; any distribution to the extent such distribution is required under Section 401(a)(9) of the Code; the portion of any distribution that is not includable in gross income (determined without regard to the exclusion for net unrealized appreciation with respect to Employer Stock); and any distributions attributable to a hardship. With respect to distributions made after December 31, 2001, for purposes of the direct rollover provisions in Section 9.7 of the Plan, a portion of a distribution shall not fail to be an eligible rollover distribution merely because the portion consists of after-tax employee contributions which are not includible in gross income. However, such portion may be transferred only to (i) an individual retirement account or annuity described in Section 408(a) or (b) of the Code or, effective for distributions on or after January 1, 2008, a Roth individual retirement account of annuity described in Section 408A of the Code, or (ii) a qualified defined contribution plan described in Section 401(a) or 403(a) of the Code that agrees to separately account for amounts so transferred, including separately accounting for the portion of such distribution which is includible in gross income and the portion of such distribution which is not so includible.

(ii) **"Eligible Retirement Plan"**: An "Eligible Retirement Plan" is an individual retirement account described in Section 408(a) of the Code, an individual retirement annuity described in Section 408(b) of the Code, an annuity plan described in Section 403(a) of the Code, or a qualified plan described in Section 401(a) of the Code, an annuity contract described in Section 403(b) of the Code and an eligible plan under Section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and which agrees to separately account for amounts transferred into such plan from this Plan; or, effective January 1, 2008, a Roth IRA described in Code Section 408A(b), that accepts the Distributee's Eligible Rollover Distribution. However, in the case of an Eligible Rollover Distribution to the surviving spouse or a Participant's surviving Beneficiary, an Eligible Retirement Plan is an individual retirement account or individual retirement annuity. The definition of Eligible Retirement Plan shall also apply in the case of a distribution to a surviving spouse, or to a spouse or former spouse who is the alternate payee under a qualified domestic relation order, as defined in Section 414(p) of the Code. If any portion of an Eligible Rollover Distribution is attributable to payments or distributions from a designated Roth account, an Eligible Retirement Plan with respect to such portion shall include only another designated Roth account of the individual from whose account the payments or distributions were made, or a Roth IRA of such individual. In the case of a nonspouse beneficiary, the direct rollover may be made only to an individual retirement account or annuity described in Code Section 408(a) or 408(b) ("IRA") that is established on behalf of the designated Beneficiary and that will be treated as an inherited IRA pursuant to the provisions of Code Section 402(c)(ii). Further, the determination of any required minimum distribution under Code Section 401(a)(9) that is ineligible for rollover shall be made in accordance with IRS Notice 2007-7, Q&A 17 and 18, 2007-5 I.R.B. 395.

(iii) **"Distributee"**: A "Distributee" includes a Participant or former Participant. In addition, the Participant's spouse or former Participant's surviving spouse or surviving Beneficiary (effective January 1, 2007) and the Participant's or former Participant's spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in Section 414(p) of the Code, are distributees with regard to the interest of the spouse or former spouse.

(iv) **"Direct Rollover"**: A "Direct Rollover" is a payment by the Plan directly to the Eligible Retirement Plan specified by the Distributee.

9.8 **Requirements for Rollover by Individuals:** An Employee (whether or not a Participant under this Plan), who, as a result of a termination of another plan qualified under Section 401(a) of the Code, a termination of employment, disability or attainment of age 59½ years, has had distributed to him his entire interest in a plan which meets the requirements of Section 401(a) of the Code (hereinafter referred to as the "Other Plan") may, in accordance with procedures approved by the Committee, transfer all or any part of the distribution received from the Other Plan to the Trustees under this Plan, provided the following conditions are met:

(a) the transfer occurs on or before the 60th day following his receipt of the distribution from the Other Plan, or, if such distribution had previously been deposited in an individual retirement account (as defined in Section 408 of the Code), the transfer occurs on or

before the 60th day following his receipt of such distribution, plus earnings thereon from such individual retirement account;

(b) the distribution from the Other Plan qualifies as a lump sum distribution within the meaning of Subsection 402(e)(4)(A) of the Code or is a result of a termination of another plan qualified under Section 401(a) of the Code; and

(c) the amount transferred shall not exceed the distribution he received from the Other Plan, less the amount, if any, considered contributed by him in accordance with Subsection 402(e)(4)(D)(i) of the Code, plus earnings thereon during the period, if any, in which the amount was held in an individual retirement account.

9.9 **Transfers From Another Qualified Plan:**

(a) With respect to an Employee (whether or not a Participant under this Plan), who has an undistributed account balance in another plan which meets the requirements of Section 401(a) of the Code (hereinafter referred to as the "Other Plan"), the Committee may, in its sole discretion, approve a direct transfer of such account balance from the Other Plan to the Trustees under this Plan.

(b) If the Plan receives a direct transfer (by merger or otherwise) of elective contributions (or amounts treated as elective contributions) under a plan with a Section 401(k) arrangement, the distribution restrictions of Sections 401(k)(2) and (10) of the Code continue to apply to those transferred elective contributions.

9.10 **Procedures:** With respect to transfers under either Section 9.8 or 9.9 herein, the Committee shall develop such procedures, and may require such information from an Employee or the fiduciaries of the Other Plan desiring to make such a transfer, as it deems necessary or desirable to determine that the proposed transfer will meet requirements of this Article and the law. Upon approval by the Committee, the amount transferred shall be deposited in the Trust Fund and shall be credited to a Rollover Account established in the Employee's name. Such Account shall be 100% vested in and nonforfeitable by the Employee, shall share in increases and decreases thereon determined in accordance with the Plan, but shall not share in Employer Contributions or Forfeitures. Upon termination of employment, the total amount of Employee's Participant Rollover Account shall be distributed as part of his Benefit.

ARTICLE X.
Administration

10.1 **Administration:** The Plan shall be administered by the Committee which is hereby created and established and which shall be composed of the members of the City Council of the Employer. The duties of the Committee shall be performed without compensation other than the compensation, if any, which they receive as officers of the Employer unless additional compensation is specifically provided for by action of the City Council. Any usual and reasonable expenses incurred by the Committee in the administration of this Fund and Plan shall be paid by the Employer.

(a) Committee: The Committee shall have such powers as may be necessary to discharge its duties hereunder and under the document creating the Oklahoma Municipal Retirement Fund, and under the contract for the pooling of the Fund with similar funds of other Municipalities. Such powers shall include but not be limited to the following powers and duties:

(1) to delegate to, specify, direct, and supervise the performance of duties of the Authorized Agent, as the agent of the Employer and Committee in matters relating to the Plan, the Fund, and the Oklahoma Municipal Retirement Fund, including but not limited to, the duties set forth below in Subsection 10.1(b) and including any duties of the Employer under the Plan, or as set forth in this Subsection 10.1(a);

(2) acting by direction to the Authorized Agent to file a petition for nomination, or otherwise nominate, and cause the ballot for the election of Trustees of the Oklahoma Municipal Retirement Fund;

(3) to construe and interpret the Plan and resolve any ambiguities with respect to any of the terms and provisions thereof as written and as applied to the operation of the Plan;

(4) to decide all questions of eligibility and determine the amount, manner and time of payment of any benefits hereunder;

(5) to prescribe procedures to be followed by Participants in filing applications for benefits;

(6) to make a determination as to the right of any person to a benefit and to afford any person dissatisfied with such determination the right to a hearing thereon;

(7) to receive from the Employer, the Trustees, the Trust Service Provider and the Authorized Agent, such information as shall be necessary for the proper administration of the Plan;

(8) to prepare and distribute, in such manner as it determines to be appropriate, information explaining the Plan;

(9) to furnish the Employer, upon request, such annual reports with respect to the administration of the Plan as are reasonable and appropriate;

(10) to receive and review reports from the auditor appointed by the Trustees, the City Treasurer and City Auditors, of the financial condition of the Fund;

(11) to have full power, to manage and control, the Plan and Fund and to authorize in writing, all payments from the Fund by written direction of the Authorized Agent, or otherwise;

(12) to sue in any court of competent jurisdiction for the enforcement of any contract, claim or other right, and to defend against or to compromise, settle or otherwise dispose of any claim or suit against the Employer, the Plan, or the City Treasurer, as Treasurer of the Plan; and

(13) to appoint such person or persons as necessary to perform the following:

a. to receive and separately account for, payments, appropriations, apportionments, allocations, payroll deductions, and any other assets, which are for, or consist of contributions or assets under the Plan for the Fund, which are made by the Employer, the Participants, or from any other source;

b. to transfer, remit, pay over and deliver, upon the written direction of the Authorized Agent, as soon as practicable after his receipt thereof, all such contributions and assets, to the Oklahoma Municipal Retirement Fund for management and investment;

c. to keep as evidence and permanent records, all such written directions of the Authorized Agent for such transfers and disbursements, maintain accurate accounts and records of such receipts, transfers and disbursements, and keep such other records and furnish such information and advice to the Employer, the City Council, the Committee and the Authorized Agent as may be necessary and proper for the performance of such duties in coordinating the administration and operation of the Plan;

d. maintain such records including vital statistics on health, age, sex, birth, death, Compensation and length of Service of all the Participants of the Employer or their beneficiaries who are included in the Plan or who are, or may become eligible for such inclusion, as are necessary for the proper administration of the Plan, and furnish such information as is requested by the Authorized Agent, or is requested by the Administrator;

e. notify the Authorized Agent when any Participant is eligible for Retirement under the Plan; and

f. attend meetings of the Committee while matters pertaining to the Plan, the Employees or their beneficiaries are under consideration.

The Committee shall have no power to waive or fail to apply any requirements of eligibility for a Benefit under the Plan. The Committee may adopt such rules, regulations and actuarial tables as it deems necessary or desirable to administer the Plan. All such rules,

regulations and decisions shall be uniformly and consistently applied to all Employees in similar circumstances.

Any such rule or decision which is not inconsistent with the provisions of the Plan shall be conclusive and binding upon all persons affected by it and there shall be no appeal from any ruling by the Committee which is within its authority.

When making a determination or calculation, the Committee shall be entitled to rely upon information furnished by the Trustees, the Trust Service Provider, the Employer, the Authorized Agent, the legal counsel of the Employer, or the actuary for the Plan.

(b) Authorized Agent: An Authorized Agent shall be designated in writing by the Committee and shall act as the agent of the Employer (but not the agent of the Trustees or the Trust Service Provider of the Oklahoma Municipal Retirement Fund) in matters pertaining to the Plan, the Fund and the Oklahoma Municipal Retirement Fund, to centralize in one person the local administration and coordination thereof, and to file payroll and contribution information, to file claims, forms and applications for Participants, and to advise Participants, the Employer and the Committee. The Authorized Agent, under the control and direction of the Committee, shall have such general duties as the Employer and the Committee may deem necessary and proper for such purposes, which duties shall include but not be limited to, the following:

(1) to coordinate the deduction of Participant contributions and to see that Employer and Participant contributions are properly received and forwarded promptly to the Oklahoma Municipal Retirement Fund for management and investment;

(2) to forward any communications directed to Participants and beneficiaries by the Trustees, the Trust Service Provider or the Oklahoma Municipal Retirement Fund;

(3) to lend assistance to Participants and beneficiaries in filing applications for benefits, and in communicating with the Employer, the Committee and the Trustees or the Trust Service Provider of the Oklahoma Municipal Retirement Fund and to forward such communications to the addressees;

(4) to assist the Committee in determining whether or not Employees are eligible for participation in the Plan;

(5) to certify at the direction of the Committee that a Participant is on an authorized leave of absence, paid or unpaid; and

(6) to file at the direction of the Committee a petition or nomination, and cast a ballot for election of Trustees of the Oklahoma Municipal Retirement Fund.

(c) Plan Counselor: The Committee of the Employer shall appoint the legal advisor of the Employer and the Committee, and such legal advisor shall represent them in any legal matters, proceedings, or litigation.

10.2 **Bonds:** No bond to secure the performance of administrative duties in the operation of the Plan and Fund, shall be required of any persons or organizations unless required by law, or unless required by the Trust Indenture establishing The Oklahoma Municipal Retirement Fund, or unless required by the Employer for any persons or organizations engaged in the

administration of the Plan. If such a bond is required by law, the Trustees or the Employer, the premiums therefor shall be paid as expenses of the Oklahoma Municipal Retirement Fund as to its members, agents, employees, Municipal Retirement Fund, or as expenses of the Employer as to the administration of the Plan. Any agents, officials or Employees of the Employer engaged in the administration of the Plan shall be covered as to the performance of such administrative duties, by any official or other bond covering their regular duties otherwise.

10.3 **Benefit Payments:** All benefits are to be paid pursuant to the provisions of the Plan out of the applicable portion of the Oklahoma Municipal Retirement Fund.

10.4 **Abandonment of Benefits:**

(a) If, anytime following the date either of a Participant or Beneficiary of a deceased Participant becomes entitled to receive any non-deferred benefits under the Plan, then, if the whereabouts of such Participant or Beneficiary is unknown, the benefits may be forfeited in certain limited circumstances as provided hereafter. If the Committee has mailed to the Participant or Beneficiary notice of the present right to receive benefits, and the Committee mails such notice again after one year, then, if no claim has been received by the second anniversary of the first mailing of the notice, the Accounts representing unclaimed Benefits (including those holding Employee contributions) can be forfeited pursuant to Section 5.4 herein.

(b) Each Participant and Beneficiary shall file with the Committee, from time to time in writing, their post office address and each change of post office address, if any, and the Committee shall not be obliged to search for or ascertain the whereabouts of any Participant or Beneficiary. Any communication addressed to a Participant or Beneficiary at their last post office address filed with the Committee, or if no such address was filed, then at their last post office address as shown on the Employer's records, shall be binding on the Participant and the Beneficiary for all purposes of the Plan and Trust.

(c) In the event that the whereabouts of a lost Participant, or lost Beneficiary of a deceased Participant, ever becomes known to the Committee, and either of such parties makes a claim for benefits, the Committee shall, if the Plan is in existence, reinstate any Benefits which have been previously forfeited to satisfy such claim; provided, the amount reinstated shall, in any event, be equal to the amount of the forfeited benefit unadjusted by any increases or decreases under Section 5.6 herein occurring after such forfeitures were allocated. Reinstated Forfeitures shall be satisfied from the following sources in the priority indicated: (i) unallocated Forfeitures, (ii) unallocated Fund increases, or (iii) Employer contributions which the Employer shall make if necessary to satisfy such reinstatement. For purposes of this Subsection (c), the limitations under Section 415 of the Code shall not apply.

10.5 **Benefits Payable to Incompetents:** Any payments due hereunder to a minor or other person under legal disability may be made, at the discretion of the Committee, to a valid power of attorney, a court appointed guardian, or any other person authorized under state law to receive the benefit. The Committee shall not be required to see to the application of any such payment, and the payee's receipt shall be a full and final discharge of all responsibility hereunder of the Employer, the Committee and the Trustees.

ARTICLE XI.
General

11.1 **USERRA:** Notwithstanding any provision of this Plan to the contrary, effective December 12, 1994, contributions, benefits and service credit with respect to qualified military service will be provided in accordance with Section 414(u) of the Code. A Participant returning from military service shall not be entitled to catch-up on Pick-Up Contributions missed during such military service.

11.2 **Not Contract Between Employer and Participant:** Neither the creation of this Plan, nor any amendment to it, nor the creation of any fund, nor the payment of benefits hereunder shall be construed as giving any legal or equitable right to any Participant against the Employer or against the Oklahoma Municipal Retirement Fund, except as provided herein, and all liabilities under this Plan shall be satisfied, if at all, only out of the Fund held by the Oklahoma Municipal Retirement Fund. Participation in the Plan shall not give any Participant any right to be retained in the employ of the Employer, and the Employer hereby expressly retains the right to hire and discharge any Participant at any time with or without cause, as if this Plan had not been adopted, and any such discharged Participant shall have only such rights or interests in the Fund as may be specified herein.

11.3 **Payment of Fees:** The Employer shall pay a fee in an amount determined and revised from time to time by the Oklahoma Municipal Retirement Fund.

11.4 **Governing Law:** The validity, construction and administration of this Plan shall be determined under the laws of the State of Oklahoma.

11.5 **Counterpart Execution:** This Plan may be executed in two or more counterparts, as may be all amendments thereto be executed, and any one of the executed copies shall be deemed an original.

11.6 **Severability:** Every provision of this Agreement is intended to be severable. If any term or provision hereof is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of this Plan.

11.7 **Spendthrift Provisions:** Benefits payable under this Plan shall not be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, charge, garnishment, execution or levy of any kind, either voluntary or involuntary, including any such liability which is for alimony or other payments for the support of a spouse or former spouse, or for any other support of a spouse or former spouse, or for any other relative of the Employee, prior to actually being received by the person entitled to the benefit under the terms of the Plan; and any attempt to anticipate, alienate, sell, transfer, assign, pledge, encumber, charge or otherwise dispose of any right to benefits payable hereunder, shall be void. The Fund shall not in any manner be liable for, or subject to, the debts, contracts, liabilities, engagements or torts of any person entitled to benefits hereunder. The preceding provisions shall not apply to the creation, assignment or recognition of a right to any benefit payable with respect to a Participant pursuant to a domestic relations order, and does not preclude the Oklahoma Municipal

Retirement Fund from complying with a court order requiring deduction from the benefits of a Participant in pay status for alimony and support payments.

11.8 **Maximum Duration:** Nothing herein shall be construed to suspend the power of alienation or prevent the vesting of the interest of any person in the Plan for a longer period than the duration of the lives of the designated Beneficiaries of a particular interest therein in being at the time such designation becomes irrevocable, plus twenty-one (21) years; if any provisions shall be held to violate a rule or law against restraints on alienation or remote vesting, the Plan shall not be vitiated thereby, but the Plan, or the portion of the Plan thus affected, shall immediately be distributed to those entitled as their interest shall then appear.

11.9 **Number and Gender:** Pronouns and other similar words used herein in the masculine gender shall be read as the feminine gender where appropriate; pronouns and other similar words used herein in the neuter gender shall be read as the masculine or feminine gender where appropriate; and the singular form of words shall be read as the plural where appropriate.

11.10 **Compensation and Expenses of Administration:** If a Trustee, a member of Oklahoma Municipal Retirement Fund, or a member of the Committee is an Employee of the Employer, he shall serve without any additional compensation. The Employer may pay all or part of the expenses of administration of the Plan, including the compensation and expenses of the Trustee, and any other expenses incurred at the direction of the Oklahoma Municipal Retirement Fund, including, without limitation, fees of actuaries, accountants, attorneys, investment managers, investment advisors and other specialists, and any other costs of administering the Plan. To the extent that any of such expenses are not paid by the Employer, such expenses shall be paid by the Oklahoma Municipal Retirement Fund out of the Fund. In addition, the Plan or Trustees shall be authorized to charge to a Participant's Account any direct expenses it incurs in connection with such Account, which shall include by example, and not by limitation, expenses resulting from a Participant's QDRO, bankruptcy or default on a Plan loan, and expenses incurred in attempting to locate a Participant. Trustees shall have the power under this Section in their sole discretion to determine the items and amounts thereof which should equitably and reasonably be charged to a particular Account. If such charges exceed the balance in a Participant's Accounts, the excess shall be charged to the general Trust Fund.

11.11 **Supercession of Inconsistent Provisions:** The provisions of the Plan override any conflicting provision contained in the Trust or custodial account documents used with the Plan.

11.12 **Mistake of Fact:** All contributions to the Plan are made subject to the correctness of the amount. In the event a contribution is made to the Plan and Trust by the Employer under a mistake of fact concerning the correctness of such contribution, then the Oklahoma Municipal Retirement Fund shall return such portion of such contribution which is in excess of the amount that would have been contributed had there not occurred a mistake of fact within one year after the payment of the contribution to the Oklahoma Municipal Retirement Fund.

In the case of amounts returned pursuant to this Section 11.12, no earnings attributable to such amounts may be returned to the Employer, but losses attributable thereto shall reduce the amount returned, and no such return shall reduce the balance of any Participant's Municipality

Contribution Accounts to less than the balance which would have been credited thereto had such amount not been contributed.

11.13 **Written Notices:** Any reference herein to written notices or documents or notices or elections in writing shall be deemed to include any method of communication acceptable to the Oklahoma Municipal Retirement Fund, and subject to applicable requirements of Treas. Reg. Section 1.401(a)-21.

IN WITNESS WHEREOF, and as conclusive evidence of the adoption of the foregoing instrument comprising the Plan, the Oklahoma Municipal Retirement Fund, has caused its corporate seal to be affixed hereto and these presents to be duly executed in its name and behalf by its proper officers thereunto authorized this 17th day of December, 2021.

OKLAHOMA MUNICIPAL RETIREMENT FUND

By _____

ATTEST:

By _____
Secretary

STATE OF OKLAHOMA)
) ss.
COUNTY OF OKLAHOMA)

BEFORE ME, the undersigned a Notary Public in and for said County and State, on this 17 day of December, 2021, personally appeared Donna Doden, to me known to be the identical person who subscribed the name of the Oklahoma Municipal Retirement Fund, a municipal corporation, to the foregoing instrument as its Chairperson and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, the day and year last above written.

_____
Notary Public

My Commission Expires:
09/27/2025

My Commission No.: 21012746

(NOTARY SEAL)

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE EMPLOYEE RETIREMENT SYSTEM, DEFINED CONTRIBUTION PLAN FOR THE POSITION OF DEPARTMENT HEAD OR CITY MANAGER FOR THE CITY OF SHAWNEE, OKLAHOMA BY ADOPTING A REVISED AND RESTATED RETIREMENT PLAN; PROVIDING RETIREMENT BENEFITS FOR ELIGIBLE EMPLOYEES OF THE CITY OF SHAWNEE, OKLAHOMA; PROVIDING FOR PURPOSE AND ORGANIZATION; PROVIDING FOR DEFINITIONS; PROVIDING FOR ELIGIBILITY AND PARTICIPATION; PROVIDING FOR NON-ALIENATION OF BENEFITS; PROVIDING FOR EMPLOYER AND EMPLOYEE CONTRIBUTIONS; PROVIDING FOR ACCOUNTING, ALLOCATION, AND VALUATION; PROVIDING BENEFITS; PROVIDING FOR REQUIRED NOTICE; PROVIDING FOR AMENDMENTS AND TERMINATION; PROVIDING FOR TRANSFER TO AND FROM OTHER PLANS; CREATING A RETIREMENT COMMITTEE AND PROVIDING FOR POWERS, DUTIES, AND RIGHTS OF RETIREMENT COMMITTEE; PROVIDING FOR PAYMENT OF CERTAIN OBLIGATIONS; PROVIDING FOR DURATION AND PAYMENT OF EXPENSES; PROVIDING FOR EFFECTIVE DATE; PROVIDING FOR VESTING SCHEDULES; PROVIDING FOR A FUND TO FINANCE THE SYSTEM TO BE POOLED WITH OTHER INCORPORATED CITIES TOWNS AND THEIR AGENCIES AND INSTRUMENTALITIES FOR PURPOSES OF ADMINISTRATION, MANAGEMENT, AND INVESTMENTS PART OF THE OKLAHOMA MUNICIPAL RETIREMENT FUND; PROVIDING FOR PAYMENT OF ALL CONTRIBUTIONS UNDER THE SYSTEM TO THE OKLAHOMA MUNICIPAL RETIREMENT FUND FOR MANAGEMENT AND INVESTMENT; PROVIDING FOR REPEALER AND SEVERABILITY; ADOPTING THOSE AMENDMENTS MANDATED BY THE INTERNAL REVENUE CODE; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COMMISSION OF SHAWNEE, OKLAHOMA:

Section 1. That pursuant to the authority conferred by the laws of the State of Oklahoma, and for the purpose of encouraging continuity and meritorious service on the part of City employees and thereby promote public efficiency, there is hereby authorized created, established, and approved and adopted, effective as of **April 1, 2022,** the amended and restated Plan designated "Employee Retirement System of the City of Shawnee**,** Oklahoma, Defined Contribution Plan," (hereinafter called System), an executed counterpart of which is marked Exhibit "A" (Joinder Agreement) and Exhibit "B" (amended and restated plan) and attached hereto as part hereof.

Section 2. FUND. A fund is hereby provided for the exclusive use and benefit of the persons entitled to benefits under the System. All contributions to such fund shall be paid over to and received in trust for such purpose by the City. Such Fund shall be pooled for purposes of management and investment with similar funds of other incorporated cities, towns, and municipal trusts in the State of Oklahoma as a part of the Oklahoma Municipal Retirement Fund in accordance with the trust agreement of the Oklahoma Municipal Retirement Fund, a public trust. The City shall hold such contributions in the form received, and from time to time pay over and transfer the same to the Oklahoma Municipal Retirement Fund**,** as duly authorized and directed by the Board of Trustees. The Fund shall be nonfiscal and shall not be considered in computing any levy when the annual estimate is made to the County Excise Board.

Section 3. APPROPRIATIONS. The City of Shawnee, Oklahoma, is hereby authorized to incur the necessary expenses for the establishment, operation, and administration of the System, and to appropriate and pay the same. In addition, the City of Shawnee, Oklahoma**,** is hereby authorized to appropriate annually such amounts as are required in addition to employee contributions to maintain the System and the Fund in accordance with the provisions of the Defined Contribution Plan. Any appropriation so made to maintain the System and Fund shall be for deferred wages or salaries, and for the payment of necessary expenses of operation and administration to be transferred to the trustees of the Oklahoma Municipal Retirement Fund for such purposes and shall be paid into the Fund when available, to be duly transferred to the Oklahoma Municipal Retirement Fund.

Section 4. EXECUTION. The Mayor and City Clerk be and they are each hereby authorized and directed to execute (in counterparts, each of which shall constitute an original) the System instrument, and to do all other acts and things necessary, advisable, and proper to put said System and related trust into full force and effect, and to make such changes therein as may be necessary to qualify the same under Sections 401(a) and 501(a) of the Internal Revenue Code of the United States. The counterpart attached hereto as Exhibit "A" and Exhibit "B", which has been duly executed as aforesaid simultaneously with the passage of this Ordinance and made a part hereof, is hereby ratified and confirmed in all respects.

This Committee is hereby authorized and directed to proceed immediately on behalf of the City of Shawnee, Oklahoma, to pool and combine the Fund into the Oklahoma Municipal Retirement Fund as a part thereof, with similar funds of such other cities and towns, for purposes of pooled management and investment.

Section 5. REPEALER. Any Ordinance inconsistent with the terms and provisions of this Ordinance is hereby repealed, provided, however, that such repeal shall be only to the extent of such inconsistency and in all other respects this Ordinance shall be cumulative of other ordinances regulating and governing the subject matter covered by this Ordinance.

Section 6. SEVERABILITY. If, regardless of cause, any section, subsection, paragraph, sentence, or clause of this Ordinance, including the System as set forth in Exhibit "A" and Exhibit "B"**,** is held invalid or to be unconstitutional, the remaining sections, subsections, paragraphs, sentences, or clauses shall continue in full force and effect and shall be construed thereafter as being the entire provisions of this Ordinance.

Section 7. EMERGENCY. Whereas, in the judgment of the City Commission of the City of Shawnee, Oklahoma, the public peace, health, safety, and welfare of the City of Shawnee, Oklahoma, and the inhabitants thereof demand the immediate passage of this Ordinance, an emergency is hereby declared, the rules are suspended, and this Ordinance shall be in full force and effective on its passage, approvals and publication.

*****END*****

The undersigned hereby certifies that the foregoing Ordinance was introduced before the City Commission of the City of Shawnee on the _____ day of _____, 20_____, and was duly adopted and approved by the Mayor and City Commission, on the _____ day of _____, 20_____, after compliance with notice requirements of the Open Meeting Law (25 OSA, Sections 301, et. seq.).

PASSED AND APPROVED this ___ day of _____, 2022.

_____
ED BOLT, MAYOR

(SEAL)
ATTEST:

_____
LISA LASYONE, CMC, CITY CLERK

PASSED AND APPROVED and the emergency clause voted on separately this ___ day of _____**,** 2022.

_____
ED BOLT, MAYOR

(SEAL)
ATTEST:

_____
LISA LASYONE, CMC, CITY CLERK

Approved as to form and legality this _____ day of _____, 2022

_____
JOSEPH M. VORNDRAN
CITY ATTORNEY

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN
JOINDER AGREEMENT

City of Shawnee [a municipality or authority chartered, incorporated or formed under the laws of Oklahoma], a city, town, agency, instrumentality, or public trust located in the State of Oklahoma, with its principal office at Shawnee, Oklahoma, hereby establishes a Defined Contribution Plan to be known as **City of Shawnee City Mangement Plan** (the "Plan") in the form of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan.

Except as otherwise provided herein, the definitions in Article II of the Plan apply.

1. **Dates.**
   - [ ] This instrument is a new Plan effective __ ("Effective Date") [such date may not be earlier than the first day of the Plan Year in which it is executed].
   - [X] This instrument is an amendment, restatement, and continuation of the Previous Plan, which was originally effective May 1, 2008. The effective date of this Joinder Agreement is **April 1, 2022** ("Effective Date") [date may not be prior to Plan Year of the date of execution], except as otherwise stated in the Plan and the Joinder Agreement.
2. **Employee.**

   The word "Employee" shall mean:
   - [ ] Any person, other than a Leased Employee, who, on or after the Effective Date, is considered to be a regular full-time employee in accordance with the Employer's standard personnel policies and practices, and is receiving remuneration for such services rendered to the Employer (including any elected official and any appointed officer or employee of any department of the Employer, whether governmental or proprietary in nature), including persons on Authorized Leave of Absence. Employees shall not include independent contractors. Elected members of the City Council shall not be considered to be Employees solely by reason of their holding such office.
   - [ ] Any person, other than a Leased Employee, who, on or after the Effective Date, is considered to be a regular employee in accordance with the Employer's standard personnel policies and practices (including part-time, seasonal and temporary employees), and is receiving remuneration for such services rendered to the Employer (including any elected official and any appointed officer or employee of any department of the Employer, whether governmental or proprietary in nature), including persons on Authorized Leave of Absence. Employees shall not include independent contractors. Elected members of the City Council shall not be considered to be Employees solely by reason of their holding such office.
   - [X] Any person who, [X] on or after the Effective Date, [ ] as of , holds the position of:
     - [X] City Manager, City or Town Administrator, President, Chief Executive Officer, General Manager, or District Manager, as applicable.
     - [ ] Assistant City Manager [ ] Chief of Police [ ] Fire Chief
     - [X] Department Head or Department Manager [ ] Finance Director or Chief Financial Officer
     - [ ] General Counsel or Municipal Attorney [ ] Municipal Judge
     - [ ] _ (specify position)

   The word "Employee" shall not include:
   - [ ] Any person who is currently accruing benefits under any other state or local retirement system.
   - [ ] Any person in the following position and who is covered under another retirement program or system approved by the City:
     - [ ] City Manager, City or Town Administrator, President, Chief Executive Officer, General Manager, or District Manager, as applicable.
     - [ ] Assistant City Manager [ ] Chief of Police [ ] Fire Chief
     - [ ] Department Head or Department Manager
     - [ ] Finance Director or Chief Financial Officer
     - [ ] General Counsel or Municipal Attorney [ ] Municipal Judge
     - [ ] __ (specify position)
   - [ ] Any person who _ [description may include a position but not the name of an individual].

3. **Entry Date.**
Eligible Employees shall commence participation in the Plan: (Select only one)
[ ] months (any number of months up to twelve) after the later of the Employee's Employment Commencement Date or the date the definition of Employee in Section 2 hereof was met, provided that the individual has met the definition of Employee in Section 2 hereof throughout such period.
[X] On the Employee's Employment Commencement Date. (If the Employer has opted out of Old Age and Disability Insurance (OADI), this option must be elected).

4. **Definition of Compensation.**
Compensation shall exclude the item(s) listed below:
[ ] No exclusions.
[ ] Overtime pay.
[ ] Bonuses.
[ ] Commissions.
[ ] Longevity pay.
[X] Severance pay.
[ ] Fringe benefits, expense reimbursements, deferred compensation and welfare benefits.
[X] Accrued vacation or sick leave paid upon termination of employment and moving expenses.
[ ] Other: [must be definitely determinable]

5. **Plan Design.**
The Employer hereby elects the following Plan design:
[X] **Pick-up Option**. Each Employee shall be required to contribute to the Plan **3.75% (or 8.00% in the case of the Police Chief and Fire Chief)** of his or her Compensation. These contributions shall be picked up and assumed by the Employer and paid to the Fund in lieu of contributions by the Participant. No Participant shall have the option of receiving the contributed amounts directly as Compensation.

[ ] **Thrift Plan Option**.
[ ] A Participant may elect to contribute to the Plan for each Valuation Period an amount which is at least 1%, but no more than % of his Compensation ("Mandatory Contributions"). Mandatory Contributions shall be made by payroll deductions. A Participant shall authorize such deductions in writing on forms approved by, and filed with the Committee.
[ ] The Employer shall contribute to the Fund an amount equal to % of the total Mandatory Contributions contributed by Participants.
The Employer contribution shall be allocated in the proportion which the Mandatory Contributions of each such Participant for such Valuation Period bear to the total Mandatory Contributions contributed by all such Participants for such Valuation Period. Forfeitures attributable to Employer contributions under the Thrift Plan Option of this Section 5 shall be used to reduce Employer contributions under such Option.

[X] **Fixed Option**. The Employer shall contribute to the Fund an amount equal to **5.00%** of the total covered Compensation of all Participants for the Valuation Period. The Employer contribution shall be allocated in the proportion which the Compensation of each such Participant for such Valuation Period bears to the Compensation paid to all such Participants for such Valuation Period.

[X] **Variable Option**.
[X] The Employer may make a contribution to the Plan for the benefit of the Participants for each Valuation Period. The contribution may be varied from year to year by the Employer. (Select one option below)
[ ] Option A: The Employer contribution shall be allocated in the proportion that each such Participant's total points awarded bear to the total points awarded to all Participants with respect to such year. A Participant shall be awarded one point for each Year of Service.
[X] Option B: The Employer contribution shall be allocated in the proportion which the Compensation of each such Participant for such Valuation Period bears to the Compensation paid to all such Participants for such Valuation Period.

[ ] Option C: A combination of Options A and B in the following ratios: % for Option A, and % for Option B.

[ ] **401(k) Option**.
(This Option available only if elected prior to May 1, 1986)

[ ] Participant Deferral Elections shall be allowed under the provisions of Section 4.8 of the Plan. Participants shall be allowed to defer no more than % of their Compensation for each election period.

[ ] Section 4.8(d) of the Plan ("Roth Elective Deferrals") shall apply to contributions after (enter a date later than January 1, 2006, but not earlier than the date the Roth option was initially adopted), and the Plan will accept a direct rollover from another Roth elective deferral account under an applicable retirement plan as described in Code Section 402A(e)(1).

[ ] **Matching Contribution Option**. The Employer shall contribute to the Fund an amount equal to % of the Participant's contributions under the Employer's Section 457(b) Deferred Compensation Plan. The Employer matching contribution shall be limited to % of the Participant's Compensation. Forfeitures attributable to Employer matching contributions under this Matching Contribution Option of Section 5 shall be used to reduce Employer matching contributions under such Option.

[ ] **No Employer Contribution Option**.

6. **Other Participant Contribution Options.**
[X] Voluntary Nondeductible Contributions by Participants shall be allowed under the provisions of Section 4.4 of the Plan.
[ ] A Participant may not withdraw Voluntary Nondeductible Contributions.
[ ] Participants shall not contribute to the Plan.

7. **Self-Directed Investments.**
[X] Are permitted.
[ ] Are not permitted.

8. **Allocation of Forfeitures Available.**
Forfeitures of Employer contributions attributable to the Fixed Option or Variable Option under Section 5 hereof:
[ ] Shall be added to Employer contribution under such Option for the calendar quarter following the Participant's Break in Service.
[X] Shall reduce the Employer contribution under such Option for the current or next following Plan Year.

9. **Service for Worker's Compensation Period.**
If a Participant is on an Authorized Leave of Absence and is receiving worker's compensation during such Authorized Leave of Absence, such Participant
[X] shall be credited with Service for such period for purposes of vesting only and not for purposes of allocations of Employer Contributions.
[ ] shall not be credited with Service for such period.

10. Vesting.

For purposes of vesting under Section 6.4 of the Plan, the Employer hereby elects the following Option:

[ ] Option A

Years of Service	Vested Percentage	Forfeited Percentage
less than 1	0%	100%
at least 1 but less than 2	10%	90%
at least 2 but less than 3	20%	80%
at least 3 but less than 4	30%	70%
at least 4 but less than 5	40%	60%
at least 5 but less than 6	50%	50%
at least 6 but less than 7	60%	40%
at least 7 but less than 8	70%	30%
at least 8 but less than 9	80%	20%
at least 9 but less than 10	90%	10%
10 or more	100%	0%

[ ] Option B

Years of Service	Vested Percentage	Forfeited Percentage
Less than 3	0%	100%
at least 3 but less than 4	20%	80%
at least 4 but less than 5	40%	60%
at least 5 but less than 6	60%	40%
at least 6 but less than 7	80%	20%
7 or more	100%	0%

[ ] Option C

Years of Service	Vested Percentage	Forfeited Percentage
less than 5	0%	100%
at least 5 but less than 6	50%	50%
at least 6 but less than 7	60%	40%
at least 7 but less than 8	70%	30%
at least 8 but less than 9	80%	20%
10 or more	100%	0%

[X] Option D

Years of Service	Vested Percentage	Forfeited Percentage
Immediate 100% Vesting	100%	0%

[ ] Option E

The Schedule indicated below (the sum of the Vested Percentage and Forfeited Percentage at each Year of Service must equal 100%) the vesting schedule must be at least as favorable as one of the safe harbor pre-ERISA schedules. The safe harbor vesting schedules are:

a. 15-year cliff vesting schedule: The plan provides that a participant is fully vested after 15 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service).

b. 20-year graded vesting schedule: The plan provides that a participant is fully vested based on a graded vesting schedule of 5 to 20 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service).

c. 20-year cliff vesting schedule for qualified public safety employees: The plan provides that a participant is fully vested after 20 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service). This safe harbor would be available only with respect to the vesting schedule applicable to a group in which substantially all of the participants are qualified public safety employees (within the meaning of Section 72(t)(10)(B)).

Years of Service	Vested Percentage	Forfeited Percentage
less than 1	%	%
at least 1 but less than 2	%	%
at least 2 but less than 3	%	%
at least 3 but less than 4	%	%
at least 4 but less than 5	%	%
at least 5 but less than 6	%	%
at least 6 but less than 7	%	%
at least 7 but less than 8	%	%
at least 8 but less than 9	%	%
at least 9 but less than 10	%	%
10 or more	%	%

[ ] Option F

To comply with the Internal Revenue Service Regulations promulgated pursuant to the Code Section 3121(b)(7)(F), Participants who are part-time, seasonal or temporary Employees will have immediate vesting.

(If this Option F is elected, one of the other Options above must also be elected for Participants who are not part-time, seasonal or temporary Employees).

11. Participant Loans.

[X] Participant loans shall be offered pursuant to Section 6.14 of the Plan.

[ ] Participant loans shall not be offered.

12. Direct Transfer to Other Retirement Plan.

[X] Direct transfer of a Participant's accounts to another defined contribution plan sponsored by the Employer is not permitted.

[ ] The Accounts of any Participant who (i) is 100% vested in his Accounts in this Plan; (ii) has ceased to be eligible for participation in this Plan; and (iii) who becomes eligible for participation in another defined contribution retirement plan sponsored by the Employer (the "Other Retirement Plan"), shall be directly transferred to the Other Retirement Plan as soon as practicable after the Plan Administrator provides written direction to the Trustee to such effect in a form acceptable to the Trustee.

13. Valuation Date. Except with respect to any Special Valuation Date determined in accordance with Section 5.10, the Valuation Date for the Plan shall be on each business day of the Plan Year for which Plan assets are valued on an established market.

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14. The Employer has consulted with and been advised by its attorney concerning the meaning of the provisions of the Plan and the effect of entry into the Plan.

IN WITNESS WHEREOF the City of Shawnee has caused its corporate seal to be affixed hereto and this instrument to be duly executed in its name and behalf by its duly authorized officers this _____ day of _____, _____.

City of Shawnee

By:_____

Attest: Title:_____

_____

Title:_____

(SEAL)

The foregoing Joinder Agreement is hereby approved by the Oklahoma Municipal Retirement Fund this _____ day of _____, _____.

OKLAHOMA MUNICIPAL RETIREMENT FUND

By:_____

Title:_____

Attest:

_____
Secretary

(SEAL)

Required Disclosures. This Joinder Agreement is to be used only with the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan. Failure to properly complete this Joinder Agreement may result in failure of the Plan to qualify under Code Section 401(a). In accordance with IRS Rev. Proc. 2017-41, the Provider (as defined in Rev. Proc. 2017-41) who has obtained Internal Revenue Service approval of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan has authority under the Plan document to amend the Plan on behalf of adopting employers for certain changes in the Code, regulations, revenue rulings, other statements published by the Internal Revenue Service, including model, sample or other required good faith amendments. The Provider will inform adopting employers of any such amendments or of the discontinuance or abandonment of the Pre-Approved Plan document. The name, address and telephone number of the Provider is: McAfee & Taft A Professional Corporation, 211 N. Robinson, Oklahoma City, OK 73102, telephone (405) 552-2231. Any inquiries by the adopting employer regarding the adoption of the Plan, the meaning of Plan provisions, or the effect of the Internal Revenue Service advisory letter on the Pre-Approved Plan may be directed to the Provider.

Reliance on Sponsor Opinion Letter. The Provider has obtained from the IRS an Opinion Letter (as defined in Rev. Proc. 2017-41) specifying the form of this Joinder Agreement and the basic plan document satisfy, as of the date of the Opinion Letter, Code §401. An adopting Employer may rely on the Preapproved Plan Sponsor's IRS Opinion Letter only to the extent provided in Rev. Proc. 2017 41. The Employer may not rely on the Opinion Letter in certain other circumstances or with respect to certain qualification requirements, which are specified in the Opinion Letter and in Rev. Proc. 2017 41 or subsequent guidance. In order to have reliance in such circumstances or with respect to such qualification requirements, the Employer must apply for a determination letter to Employee Plans Determinations of the IRS.

Regular Board of Commissioners **8.**

Meeting Date: 04/04/2022

Ordinance

Submitted By: Kacie Eck, City Clerk

Department: City Clerk

Information

Title of Item for Agenda

Consideration and possible action of an ordinance regarding an amendment to the City of Shawnee Special Incentive CMO Plan adopting the revised and restated OkMRF (Oklahoma Municipal Retirement Fund) Master Defined Contribution Retirement Plan.

Attachments

Memo

Ordinance

Joinder Agreement

Human Resources

16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: March 25, 2022

To: City Commission

From: Jennifer Greenland, HR Director

Subject: Consideration and Possible Action on Ordinance Regarding an Amendment to the City of Shawnee Special Incentive CMO Plan Adopting the Revised and Restated OkMRF Master Defined Contribution Retirement Plan.

Background: Full-time, non-union employees participate in the Oklahoma Municipal Retirement Fund (OkMRF). The Commission is the governing body for the Shawnee Plans.

Shawnee has two types of plans, Defined Benefit (DB) and Defined Contribution (DC). The DC includes the City of Shawnee Special Incentive CMO Plan included in this agenda item.

OkMRF must follow a six-year filing cycle for preapproved plans in order to retain plan qualification and obtain a determination letter from the IRS. The IRS identified the plan as acceptable under Internal Revenue Code Section 401. The OkMRF Board approved the Amended and Restated Defined Contribution Master Plan and Joinder Agreement during their meeting in December 2021. The governing body now needs to approve and adopt the documents for our plan.

A summary of material changes was created by John A. Paphronis with McAfee & Taft.

Financial Impact: None

Attachment: Summary of Material Changes, IRS determination letter, and Master Plan

Staff Recommendation: Approval of the item.

McAFEE & TAFT
A PROFESSIONAL CORPORATION

8TH FLOOR • TWO LEADERSHIP SQUARE
211 NORTH ROBINSON • OKLAHOMA CITY, OK 73102-7103
(405) 235-9621 • FAX (405) 235-0439
www.mcafeetaft.com

MEMORANDUM

TO: Oklahoma Municipal Retirement Fund

FROM: McAfee & Taft A Professional Corporation
(John A. Papahronis)

DATE: November 12, 2021

RE: Oklahoma Municipal Retirement Fund Master Defined Contribution Plan and Joinder Agreement—Summary of Material Changes

The following summary compares the current version of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan and Joinder Agreement with the version recently approved by the Internal Revenue Service:

A. Master Defined Contribution Plan

Sec.	Feature	Current Version	Newly-Approved Version
1.1	Purpose	States the purpose of the Plan.	Adds IRS required sentence that the plan is intended to qualify as a governmental plan.
1.3	Exclusive Benefit	None	Added IRS required language that the Plan is for the exclusive benefit of employees. Expanded language that was previously in 1.1.
2.1(m)	Definition of Compensation	Includes historical language required by IRS	Deletes historical IRS required language that is obsolete.
2.1(r)	Definition of Employee	None	Includes a definition of Employee by cross referencing Joinder Agreement.
4.5	Change of Rate of Voluntary Nondeductible Contributions	Permits Participant to change rate of payroll deduction	Deletes reference to minimum and maximum rates.

4.8(d)(i)(3)	Roth Elective Deferrals	Provisions describing permitted Roth Elective Deferrals	Added IRS required language regarding correction of excess contributions of Roth Elective Deferrals.
5.11(a)(iv)	Maximum Permissible Amount	Definition for IRS limit	Updated IRS dollar limit for current amount.
6.12	Loss of Benefits for Cause	Reserved Section holder	Deleted per request of IRS.
6.17	Forfeiture of Benefits	Reserved Section holder	Deleted per request of IRS.
8.5	Provider's Power to Amend	Authority of Volume Submitter Practitioner to Amend for Adopting Employers	Modified to reflect current IRS terminology in accordance with Rev. Proc. 2017-41.
10.5	Benefits Payable to Incompetents	Protocol for benefit payments to incompetents	Modified to provide payments will be made to valid power of attorney, court appointed guardian, or other person authorized under state law.
11.11	Supersession of Inconsistent Provisions	Incorporates provisions of Trust Indenture	IRS required deletion of incorporation of provisions of Trust Indenture.

B. Joinder Agreement

Sec.	Feature	Current Version	Newly-Approved Version
8.	Forfeitures	Timing of allocation of forfeitures not specified	Timing of allocation specified
Sig. page	Required Disclosure re: IRS Approval	IRS required disclosure regarding the use and restrictions of IRS Preapproved Plan	Update language to meet current IRS requirements

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

TAX EXEMPT AND
GOVERNMENT ENTITIES
DIVISION

Plan Description: Non-Standardized Pre-Approved Profit Sharing Plan With CODA
FFN: 317D1080001-001 Case: 201800527 EIN: 73-0781676
Letter Serial No: Q702320a
Date of Submission: 12/18/2018

MCAFEE & TAFT
211 NORTH ROBINSON
TWO LEADERSHIP SQUARE, 10TH FLOOR
OKLAHOMA CITY, OK 73102

Contact Person:
Janell Hayes
Telephone Number:
513-975-6319
In Reference To: TEGE:EP:7521
Date: 06/30/2020

Dear Applicant:

In our opinion, the form of the plan identified above is acceptable for use by employers for the benefit of their employees under Internal Revenue Code (IRC) Section 401.

We considered the changes in qualification requirements in the 2017 Cumulative List of Notice 2017-37, 2017-29 Internal Revenue Bulletin (IRB) 89. Our opinion relates only to the acceptability of the form of the plan under the IRC. We did not consider the effect of other federal or local statutes.

You must provide the following to each employer who adopts this plan:
. A copy of this letter
. A copy of the approved plan
. Copies of any subsequent amendments including their dates of adoption
. Direct contact information including address and telephone number of the plan provider

Our opinion on the acceptability of the plan's form is a determination as to the qualification of the plan as adopted by a particular employer only under the circumstances, and to the extent, described in Revenue Procedure (Rev. Proc.) 2017-41, 2017-29 I.R.B. 92. The employer who adopts this plan can generally rely on this letter to the extent described in Rev. Proc. 2017-41. Thus, Employee Plans Determinations, except as provided in Section 12 of Rev. Proc. 2020-4, 2020-01 I.R.B. 148 (as updated annually), will not issue a determination letter to an employer who adopts this plan. Review Rev. Proc. 2020-4 to determine the eligibility of an adopting employer, and the items needed, to submit a determination letter application. The employer must also follow the terms of the plan in operation.

Except as provided below, our opinion doesn't apply to the requirements of IRC Sections 401(a)(4), 401(l), 410(b), and 414(s). Our opinion doesn't apply to IRC Sections 415 and 416 if an employer maintains or ever maintained another qualified plan for one or more employees covered by this plan. For this purpose, we will not consider the employer to have maintained another defined contribution plan provided both of the following are true:
. The employer terminated the other plan before the effective date of this plan
. No annual additions have been credited to any participant's account under the other plan as of any date within the limitation year of this plan

Also, for this purpose, we'll consider an employer as maintaining another defined contribution plan, if the employer maintains any of the following:
. A welfare benefit fund defined in IRC Section 419(e), which provides post-retirement medical benefits allocated to separate accounts for key employees as defined in IRC Section 419A(d)

. An individual medical account as defined in IRC Section 415(l)(2), which is part of a pension or annuity plan maintained by the employer
. A simplified employee pension plan

Our opinion doesn't apply to Treasury Regulations Section 1.401(a)-1(b)(2) requirements for a money purchase plan or target benefit plan where the normal retirement age under the employer's plan is lower than age 62.

Our opinion doesn't constitute a determination that the plan is an IRC Section 414(d) governmental plan. This letter is not a ruling with respect to the tax treatment to be given contributions which are picked up by the governmental employing unit within the meaning of IRC Section 414(h)(2).

Our opinion doesn't constitute a determination that the plen is an IRC Section 414(e) church plan.

Our opinion may not be relied on by a non-electing church plan for rules governing pre-ERISA participation and coverage.

Our opinion applies to the requirements of IRC Section 410(b) if 100 percent of all non-excludable employees benefit under the plan.

Employers who choose a safe harbor allocation formula and a safe harbor compensation definition may also rely on this opinion letter for the non-discriminatory amounts requirement under IRC Section 401(a)(4).

If this plan includes a cash or deferred arrangement (CODA) or otherwise provides for contributions subject to IRC Sections 401(k) and/or 401(m), the employer may rely on the opinion letter regarding the form of the non-discrimination tests of IRC Sections 401(k)(3) and 401(m)(2), if the employer uses a safe harbor compensation definition. For plans described in IRC Sections 401(k)(12) or (13) and/or 401(m)(11) or (12), employers may rely on the opinion letter regarding whether the plan's form satisfies the requirements of those sections unless the plan provides for the safe harbor contribution to be made under another plan. For SIMPLE plans described in IRC Sections 401(k)(11) and 401(m)(10), employers may also rely on the opinion letter regarding whether the plan's form satisfies the requirements of those sections.

The provisions of this plan override any conflicting provision contained in the trust or custodial account documents used with the plan, and an adopting employer may not rely on this letter to the extent that provisions of a trust or custodial account that are a separate portion of the plan override or conflict with the provisions of the plan document. This opinion letter does not cover any provisions in trust or custodial account documents.

An employer who adopts this plan may not rely on this letter when:
. the plan is being used to amend or restate a plan of the employer which was not previously qualified
. the employer's adoption of the plan precedes the issuance of the letter
. the employer doesn't correctly complete the adoption agreement or other elective provisions in the plan
. the plan is not identical to the pre-approved plan (that is, the employer has made amendments that cause the plan not to be considered identical to the pre-approved plan, as described in Section 8.03 of Rev. Proc. 2017-41)

Our opinion doesn't apply to what is contained in any documents referenced outside the plan or adoption agreement, if applicable, such as a collective bargaining agreement.

Our opinion doesn't consider issues under Title I of the Employee Retirement Income Security Act (ERISA) which are administered by the Department of Labor.

If you, the pre-approved plan provider, have questions about the status of this case, you can call the telephone number at the top of the first page of this letter. This number is only for the provider's use.

Individual participants or adopting eligible employers with questions about the plan should contact you.

You must include your address and telephone number on the pre-approved plan or the plan's adoption agreement, if applicable, so that adopting employers can contact you directly.

If you write to us about this plan, provide your telephone number and the best time to call if we need more information. Whether you call or write, refer to the letter serial number and file folder number at the top of the first page of this letter.

Let us know if you change or discontinue sponsorship of this plan.

Keep this letter for your records.

Sincerely Yours,

Khin M. Chow

Khin M. Chow
Director, EP Rulings & Agreements

Letter 6186 (June-2020)
Catalog Number 72434C

Exhibit B

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN

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ARTICLE I.
Purpose and Organization

1.1 **Purpose**: The purpose of this Plan is to encourage the loyalty and continuity of service of the Participants, to provide retirement benefits for all eligible Employees of the Employer, as hereinafter defined, who complete a period of faithful service and become eligible hereunder, and to qualify the Plan under Section 401(a) of the Code. It is intended that the Plan satisfy Section 401(a) of the Code by meeting the requirements of Section 414(d) of the Code. The benefits provided by this Plan will be paid from a Fund established by the Employer and will be in addition to the benefits Employees are entitled to receive under any other programs of the Employer and from the Federal Social Security Act.

The design type of this Plan is a profit sharing plan. To the extent this Plan is a governmental retiree benefit plan under Section 401(a)(24) of the Code, and prior to the termination of the Plan and satisfaction of all liabilities of the Plan, no part of the corpus or income of the Fund shall be used for, or diverted to, purposes other than for the exclusive benefit of the Plan participants and their beneficiaries.

1.2 **Parties**: The Oklahoma Municipal Retirement Fund hereby adopts and establishes this Plan for the benefit of Employees of those Employers, as defined herein, formed, chartered or incorporated under the laws of the State of Oklahoma, who wish to adopt it by executing a Joinder Agreement which incorporates this Plan by reference.

1.3 **Exclusive Benefit:** This Plan and the separate related Fund forming a part hereof are established and shall be maintained for the exclusive benefit of the eligible Employees of the Employer and their beneficiaries. Except as provided under Section 11.12, the Employer does not have any beneficial interest in any asset of the Fund and no part of any asset in the Fund may ever revert to or be repaid to the Employer, either directly or indirectly; nor, prior to the satisfaction of all liabilities with respect to the Participants and their Beneficiaries under the Plan, may any part of the corpus or income of the Fund, or any asset of the Fund, be (at any time) used for, or diverted to, purposes other than the exclusive benefit of the Participants or their Beneficiaries and for defraying reasonable expenses of administering the Plan.

ARTICLE II.
Definitions and Construction

2.1 **Definitions**: Where the following words and phrases appear in this Plan, they shall have the respective meanings set forth below, unless their context clearly indicates to the contrary:

(a) Account: One or more of several records maintained to record the interest in the Plan of each Participant and Beneficiary, and shall include any or all, where appropriate, of the following: (i) Municipality Contribution Account, (ii) Participant Deductible Contribution Account, (iii) Participant Deferred Compensation Contribution Account, (iv) Participant Mandatory Contribution Account, (v) Participant Nondeductible Contribution Account, (vi) Participant Roth Contribution Account, (vii) Pick-Up Contribution Account, (viii) Participant Rollover Account, (ix) Catch-Up Contribution Account, and (x) Loan Account.

(b) Adjustment Factor: The cost of living adjustment factor prescribed by the Secretary of the Treasury under Section 415(d) of the Code for years beginning after December 31, 1987, as applied to such items and in such manner as the Secretary shall provide.

(c) Amount(s) Forfeited: That portion of a terminated Participant's Municipality Contribution Account to which such Participant is not entitled because of insufficient Service.

(d) Authorized Agent: The City Clerk of the Employer or such other person designated by the Employer to carry out the efficient operation of the Plan at the local level.

(e) Authorized Leave of Absence: Any absence authorized by the Employer under the Employer's standard personnel practices applied to all persons under similar circumstances in a uniform manner, including any required military service during which a Participant's re-employment rights are protected by law; provided that he resumes employment with the Employer within the applicable time period established by the Employer or by law.

(f) Beneficiary: Any person or entity designated or deemed designated by a Participant as provided in Section 6.11 hereof.

(g) Break in Service: The expiration of ninety (90) days from the date the Participant last performed Service for the Employer for which such Participant was entitled to wages as defined in Section 3121(a) of the Code unless the Participant is on Authorized Leave of Absence. If a Participant does not resume employment with the Employer upon the expiration of an Authorized Leave of Absence, the Participant will be deemed to be absent from work on the first day of his Authorized Leave of Absence for purposes of determining if the Participant has a Break in Service.

For determining the amounts to be forfeited from a Participant's account under Section 6.6, any periods of employment with the Employer during which the Participant was not considered an Employee under the Plan shall not be considered as a Break in Service that causes a forfeiture unless the Participant was covered under a state retirement system or any other program outside the Oklahoma Municipal Retirement Fund System.

(h) Catch-Up Contributions: A Participant's contributions described in Section 4.8(c) herein.

(i) Catch-Up Contribution Account: The Account maintained for a Participant in which any Catch-Up Contributions are recorded.

(j) City Council: The City Council or Board of Trustees of the Employer or other duly qualified and acting governing authority of the Employer.

(k) Code: The Internal Revenue Code of 1986, as amended from time to time.

(l) Committee: The City Council of the Municipality, which shall act as the Plan Administrator of the Plan as provided for under Article X hereof.

(m) Compensation: Compensation means wages for federal income tax withholding purposes, as defined under Code §3401(a), plus all other payments to an Employee in the course of the Employer's trade or business, for which the Employer must furnish the Employee a written statement under Code §§6041, 6051 and 6052, but determined without regard to any rules that limit the remuneration included in wages based on the nature or location of the employment or services performed (such as the exception for agricultural labor in Code §3401(a)(2)). The Employer in Section 4 of its Joinder Agreement may specify modifications to the definition of Compensation, for purposes of contribution allocations under the Plan. For purposes of determining a Participant's compensation, any election by such Participant to reduce his regular cash remuneration under Code Sections 125, 401(k), 414(h), 403(b) or 457 shall be disregarded.

(1) Limitations. The annual compensation of each Participant taken into account in determining allocations for any Plan Year beginning after December 31, 2001, shall not exceed $280,000, as adjusted for cost-of-living increases in accordance with Section 401(a)(17)(B) of the Code. Annual compensation means compensation during the Plan Year or such other consecutive 12-month period over which compensation is otherwise determined under the Plan (the determination period). The cost-of-living adjustment in effect for a calendar year applies to annual compensation for the determination period that begins with or within such calendar year. If compensation for a period of less than 12 months is used for a plan year, then the otherwise applicable compensation limit is reduced in the same proportion as the reduction in the 12-month period. If a determination period consists of fewer than 12 months, the annual compensation limit will be multiplied by a fraction, the numerator of which is the number of months in the determination period, and the denominator of which is 12.

If Compensation for any prior determination period is taken into account in determining an Employee's benefits accruing in the current Plan Year, the Compensation for that prior determination period is subject to applicable annual compensation limit in effect for that prior determination period.

For limitation years beginning on and after January 1, 2001, for purposes of applying the limitations described in this Subsection 2.1(m), Compensation paid or made available during such limitation years shall include elective amounts that are not includible in the gross income of the Employee by reason of Section 132(f)(4) of the Code.

(n) Deductible Participant Contribution: Prior to January 1, 1987, the amount a Participant may voluntarily contribute to the Plan which could not exceed the lesser of $2,000 (or such higher limit as allowed by the Code), or 100% of Compensation, and is deductible from gross income by the Participant pursuant to the Code. No Deductible Participant Contributions may be made after January 1, 1987.

(o) Deferred Compensation Contributions: A Participant's contributions described in Section 4.8 herein and credited to his Participant Deferred Compensation Contribution Account.

(p) Disability: A physical or mental condition which, in the judgment of the Committee, totally and presumably permanently prevents a Participant from engaging in any substantial gainful employment with the Employer. A determination of such disability shall be based upon competent medical evidence.

(q) Effective Date: The later of: (a) the date specified in the Joinder Agreement; or (b) the first day on which the Plan has a Participant.

(r) Employee: Shall have the meaning set forth in Section 2 of the Joinder Agreement.

(s) Employer: A Municipality chartered, incorporated or formed under the laws of the State of Oklahoma which executes the Joinder Agreement.

(t) Employment Commencement Date: The first day of the first pay period during which the Participant receives wages as defined in Section 3121(a) of the Code from the Employer.

(u) Entry Date: The date an Employee becomes a Participant.

(v) Forfeiture: The portion of a Participant's Accounts which becomes forfeitable pursuant to Section 6.6 hereof.

(w) Fund: The fund established to provide the benefits under the Plan for the exclusive benefit of the Participants included in the Plan, and which will be pooled with similar funds of other incorporated cities and towns of Oklahoma as a part of the Oklahoma Municipal Retirement Fund, for purposes of pooled management and investment.

(x) Investment Manager: A person who is either (i) registered as an investment adviser under the Investment Advisers Act of 1940, (ii) a bank, as defined in the Investment Advisers Act of 1940, or (iii) an insurance company qualified to perform investment management services under the laws of more than one state.

(y) Investment Options: Any of those investment options selected by the Committee in accordance with Section 5.12 hereof.

(z) Joinder Agreement: The agreement by which the Employer adopts this Plan and Fund as its Plan and Fund.

(aa) Leased Employee: Any person (other than an employee of the recipient) who pursuant to an agreement between the recipient and any other person ("leasing organization") has performed services for the recipient (or for the recipient and related persons determined in accordance with Section 414(n)(6) of the Code) on a substantially full time basis for a period of at least one year, and such services are performed under primary direction or control by the recipient. Contributions or benefits provided a Leased Employee by the leasing organization which are attributable to services performed for the recipient employer shall be treated as provided by the recipient employer.

A Leased Employee shall not be considered an employee of the recipient if: (I) such employee is covered by a money purchase pension plan providing: (1) a nonintegrated employer contribution rate of at least 10% of compensation, as defined in Section 415(c)(3) of the Code, but including amounts contributed pursuant to a salary reduction agreement which are excludable from the employee's gross income under Section 125, Section 402(e)(3), Section 402(h)(1)(B) or Section 403(b) of the Code, (2) immediate participation, and (3) full and immediate vesting; and (ii) leased employees do not constitute more than 20% of the recipient's nonhighly compensated work force.

(bb) Limitation Year: The twelve (12) consecutive month period ending on June 30th of each year. If the Limitation Year is amended to a different twelve (12) consecutive month period, the new Limitation Year must begin on a date within the Limitation Year in which the amendment is made.

(cc) Loan Account: A Participant's Separate Account established in the event he desires to make a loan from his applicable Account as provided in Section 6.13 herein.

(dd) Mandatory Contributions: Contributions, if elected by the Employer in the Joinder Agreement, which Participants are required to make in order to participate in the Plan.

(ee) Municipality: (1) each and every incorporated municipality in the State of Oklahoma; (2) public trusts having municipalities as a beneficiaries; (3) interlocal cooperatives created pursuant to 74 Oklahoma Statutes, Sections 1001, et seq., between municipalities and/or their public trust, and; (4) any other legal entity comprising a municipal authority as that term is used in Chapter 48 of Title 11 Oklahoma statutes, which has adopted the Plan and/or which has become a participant in the related trust according to the terms herein.

(ff) Municipality Contribution Account: The account maintained for a Participant in which his share of the contributions of the Employer and the Amounts Forfeited and any adjustments relating thereto are recorded.

(gg) Normal Retirement Date: The first day of the month occurring on or next following the date a Participant attains sixty-five (65) years of age.

(hh) Oklahoma Municipal Retirement Fund: The trust created in accordance with Sections 48-101 et seq., of Title 11, Oklahoma Statutes 1981, to combine pension and retirement funds in incorporated cities and towns of Oklahoma for purposes of management and investment, represented by and acting through its Board of Trustees.

(ii) Participant: Any Employee or former Employee who meets the eligibility requirements and is covered under the Plan.

(jj) Participant Contribution Accounts: All of the following Accounts: (i) Participant Deductible Contribution Account, (ii) Participant Deferred Compensation Contribution Account, (iii) Participant Nondeductible Contribution Account, (iv) Catch-Up Contribution Account, (v) Pick-Up Contributions Account, (vi) Participant Mandatory Contributions Account, (vii) Participant Rollover Account, and (viii) Participant Roth Contribution Account.

(kk) Participant Deductible Contribution Account: The Account maintained for a Participant in which his Deductible Participant Contributions and adjustments relating thereto are recorded.

(ll) Participant Deferred Compensation Contribution Account: The Account maintained for a Participant in which his Deferred Compensation Contributions resulting from the Participant's election under Section 4.8 of the Plan and adjustments thereto are recorded.

(mm) Participant Mandatory Contribution Account: The Account maintained for a Participant in which his Mandatory Contributions and adjustments relating thereto are recorded.

(nn) Participant Nondeductible Contribution Account: The Account maintained for a Participant in which his voluntary nondeductible contributions and adjustments relating thereto are recorded.

(oo) Participant Rollover Account: The Account maintained for a Participant in which any Rollover Contributions are recorded.

(pp) Participant Roth Contribution Account: The Account maintained for a Participant in which any Roth Contributions are recorded.

(qq) Participation: The period commencing as of the date an Employee became a Participant and ending on the date the final distributions of all the Account balances are made.

(rr) Period(s) of Service or Service:

(1) A Participant's last continuous period during which the Participant was an Employee of the Employer and/or any other Municipality prior to the earlier of his Retirement or Break in Service.

(i) Service includes employment with a Municipality other than the Employer prior to the time that the other Municipality adopted the Plan if the other Municipality credits a participant's past service under its retirement plan; and

(ii) Service for the Employer does not include employment with any Municipality if that service would not be included under the Municipality's Plan.

(2) Concurrent employment with more than one Municipality shall be credited as only one period of service.

(3) Any Authorized Leave of Absence shall not be considered as interrupting continuity of employment, provided the Employee returns within the period of authorized absence. Until such time as the City Council shall adopt rules to the contrary, credit for Service with the Employer shall be granted for any period of Authorized Leave of Absence during which the Employee's full Compensation is continued and contributions to the Fund are continued at the same rate and made by or for him, but credit for Service with the Employer shall not be granted for any period of authorized, nonpaid absence due to illness, union leave, military service, or any other reason, unless arrangements are made with the City Council for the Employee's continued participation and for contributions to be continued at the same rate and made by him or on his behalf during such absence. Provided, however, if a Participant is on an Authorized Leave of Absence and is receiving worker's compensation during such Authorized Leave of Absence, and if the Employer so elects in the Joinder Agreement, such Participant shall be credited with Service for such period for purposes of vesting only (and not for purposes of allocation of Employer Contributions).

(4) The expiration of the term of office of an elected official shall not be considered as interrupting continuity of employment, provided the official is re-elected for a consecutive term.

(5) Any reference in this Plan to the number of years of Service of a Participant shall include fractional portions of a year.

(6) With respect to a Participant who was previously 100% vested in any other Municipality's qualified retirement plan prior to becoming a Participant in this Plan, such Participant's "Service" for purposes of determining years of service for vesting under this Plan shall include the Participant's last continuous period during which the Participant was an employee of the other Municipality.

(ss) Pick-Up Contributions: The Employer's contributions described in Section 4.7 hereof and credited to his Pick-Up Contribution Account.

(tt) Pick-Up Contributions Account: The account maintained for a Participant in which his share of Pick-Up Contributions are recorded.

(uu) Plan: The Oklahoma Municipal Retirement Fund Master Defined Contribution Plan set forth herein, and all subsequent amendments.

(vv) Plan Administrator: The persons who administer the Plan pursuant to the provisions of Article X hereof.

(ww) Plan Year: Means the twelve (12) consecutive month period ending June 30th of each year. The initial or final Plan Year may be less than a twelve (12) consecutive month period.

(xx) Previous Plan: The terms and provisions in the prior instruments governing the Employer's qualified defined contribution retirement plan and related trust, and applying before the Effective Date hereof, or any other date expressly specified herein if different from the Effective Date, which prior instruments are amended, restated and superseded by this instrument.

(yy) Retirement: Termination of employment upon a Participant's attaining age 65.

(zz) Roth Contributions: A Participant's contributions described in Section 4.8(d) herein and credited to his Participant Roth Contribution Account.

(aaa) Trust Service Provider: The person appointed by the Trustee to supervise operation of the Oklahoma Municipal Retirement Fund and to assist participating Municipalities in the adoption and operation of the Plan.

(bbb) Trustee: The Trustees appointed pursuant to the Trust Indenture establishing the Oklahoma Municipal Retirement Fund.

(ccc) Valuation Date: The date specified in Section 13 of the Joinder Agreement and any Special Valuation Dates determined in accordance with Section 5.10.

(ddd) Valuation Period: The period of time between two successive Valuation Dates.

2.2 **Construction**: The masculine gender, where appearing in the Plan, shall be deemed to include the feminine gender, unless the context clearly indicates to the contrary. The words "hereof," "herein," "hereunder" and other similar compounds of the word "herein" shall mean and refer to the entire Plan, not to any particular provision or section.

ARTICLE III.
Eligibility and Participation

3.1 **Eligibility**: An Employee, as defined in the Joinder Agreement, who has satisfied all the requirements set forth in the Joinder Agreement shall be eligible to participate in the Plan. Any person who has been classified by the Employer as an independent contractor and has had his compensation reported to the Internal Revenue Service on Form 1099 but who has been reclassified as an "employee" (other than by the Employer) shall not be considered as an eligible Employee who can participate under this Plan; provided, if the Employer does reclassify such worker as an "Employee," for purposes of this Plan, such reclassification shall only be prospective from the date that the Employee is notified by the Employer of such reclassification.

3.2 **Entry Date**: The participation of an Employee eligible to become a Participant shall commence on the earliest date permitted by the Employer in the Joinder Agreement.

3.3 **Re-employment of Former Participants**: Subject to Section 3.4, if a Participant incurs a Break in Service and is subsequently re-employed by the Employer, the Participant shall not receive any credit for his previous Period of Service with the Employer and such Participant shall be treated in the same manner as a person who has not previously been employed by any Municipality.

3.4 **Re-employment of Retired or Fully Vested Participants**: If a retired or fully vested Participant is re-employed by the Employer, no distributions shall be made from the Plan during the period of such re-employment. Periods of Service prior to such Participant's retirement or termination of service, as applicable, shall count as Periods of Service for purposes of determining such Participant's vested interest in his Municipality Contribution Account.

ARTICLE IV.
Contributions

4.1 **Contributions by Employer**: The Employer shall make such contributions as set forth in the Joinder Agreement. Such contributions shall be made from the operating revenue of the current taxable year or from accumulated revenue or surplus, as appropriate. The contribution shall be determined by written action of the Employer stating the amount of such contribution, and by the payment of such stated amount to the Trustee monthly. Upon execution of the Joinder Agreement, the Employer will contribute one Dollar ($1.00) to establish the Fund. Any Participant who received Compensation from the Employer during the Valuation Period shall share in the Employer's contribution for the Valuation Period, even if not employed on the last day of the Valuation Period.

All Participant contributions shall be transmitted monthly to the Trustee after being withheld by the Employer. The Trustee shall hold all such contributions, subject to the provisions of the Plan and Fund, and no part of these contributions shall be used for, or diverted to, any other purpose.

4.2 **Required Participant Contributions**: If the Employer so elects in the Joinder Agreement, Participants shall not be required to contribute to the Plan.

4.3 **Mandatory Contributions**: If the Employer so elects in the Joinder Agreement, a Participant shall contribute to the Plan for each Plan Year the percentage of his Compensation set forth in the Joinder Agreement. Mandatory Contributions shall be made by payroll deductions. The Participant shall authorize such deductions in writing on forms approved by, and filed with, the Committee.

4.4 **Voluntary Nondeductible Contributions by Participants**: Subject to the limitations of Sections 5.11 and to such rules of uniform application as the Committee may adopt, each Participant may elect to make nondeductible contributions to the Plan. The contributions of such Participant after the Effective Date may be by payroll deduction, which the Participant shall authorize the Employer to make on written authorization forms designated by and filed with the Committee, or by cash payments by such Participant to the Trustee. The authorization to make contributions by payroll deductions shall be effective on the first day following the Committee's receipt of the payroll deduction authorization. In addition, a Participant may make Rollover Contributions notwithstanding the percentage limitations in the first sentence of this Section or the cash payment requirement of the second sentence of this Section.

4.5 **Change of Rate of Voluntary Nondeductible Contributions by Participant**: The Participant may change his rate of payroll deduction at any time, or he may discontinue his payroll deductions at any time. Any change of rate or discontinuance of payroll deductions shall be effective on the first payday following the receipt of written notice thereof by the Committee; provided, however, that not more than one change or discontinuance shall be made within a calendar month unless otherwise stated by the Committee.

The Participant must furnish the Committee at the time of any Participant Contribution or payroll deduction authorization an election designating the contribution as a Mandatory Contribution, Deductible Participant Contribution, or a Voluntary Nondeductible Contribution.

4.6 **Participant Contributions Nonforfeitable**: Each Participant who contributes hereunder shall have a nonforfeitable vested interest in that portion of the value of his own contributions not theretofore previously withdrawn by him.

4.7 **Pick-Up Contributions**: If the Employer elects in Section 5 of the Joinder Agreement, all Participants shall be required as a condition of employment to make the contributions specified in the Joinder Agreement. These contributions shall be picked up and assumed by the Employer and paid to the Fund in lieu of contributions by the Participant. Such contributions shall be designated as Employer contributions for federal income tax purposes. Each Participant's Compensation will be reduced by the amount paid to the Fund by the Employer in lieu of the required contribution by the Participant. These contributions shall be excluded from the Participant's gross income for federal income tax purposes and from wages for purposes of withholding under Sections 3401 through 3404 of the Code in the taxable year in which contributed. No Participant shall have the option of receiving the contributed amounts directly as Compensation. Contributions made by the Employer under this election shall be designated as Participant contributions for purposes of vesting, determining Participant rights and Participant Compensation. [In order for the Employer to have reliance on whether the Pick-Up Contributions comply with Section 414(h)(2) of the Code, the Employer must obtain a private letter ruling from the Internal Revenue Service.]

4.8 **Deferred Compensation Contributions**: If the Employer elects in the Joinder Agreement and if such Employer adopted a cash or deferred feature before May 7, 1986, the following provisions shall apply:

(a) Deferred Compensation Contributions under Code Section 401(k): A Participant, by written notice to the Plan Administrator, may elect to make a Deferred Compensation Contribution to the Plan rather than receive Compensation to which the Participant would otherwise be entitled during the period immediately following such election.

Subject to the limitations of this Section 4.8 and Section 5.11, a Participant's Deferred Compensation Contribution may be any whole percentage of his Compensation, but in no case shall a Participant's Deferred Compensation Contribution election exceed the percentage set forth in the Joinder Agreement. Such election shall be binding until the Participant, by written notice to the Plan Administrator, modifies or discontinues his Deferred Compensation Contribution. A Participant's initial election, or modification or discontinuance shall be effective as soon as administratively practicable following the Plan Administrator's receipt of the Participant's written notice of election, modification or discontinuance, and shall remain in effect until modified or terminated. Provided, not more than one change or discontinuance shall be made within a calendar month unless otherwise stated by the Committee.

Employer contributions made pursuant to this Section 4.8 shall be credited to the Participant's Participant Deferred Compensation Account. All such Employer contributions shall

be paid to the Trustee as soon as practicable following the retention of such amounts by the Employer from the Participant's Compensation.

(b) Dollar Limitation on Deferred Compensation Contributions:

(i) General Rule. No Participant shall be permitted to make Deferred Compensation Contributions during any calendar year in excess of the dollar limitation contained in Section 402(g) of the Code (including, if applicable, the dollar limitation on Catch-Up Contributions defined in Section 414(v) of the Code) in effect as of the beginning of the taxable year as adjusted under Section 402(g)(4) of the Code (hereafter referred to as "Excess Elective Deferrals"). In the case of a Participant who is age 50 or over by the end of the taxable year, the dollar limitation described in the preceding sentence includes the amount of Deferred Compensation Contributions that can be Catch-Up Contributions. In the event a Catch-Up Contribution eligible Participant makes Excess Elective Deferrals, the Plan Administrator shall cause such Participant's Deferred Compensation Contributions to be recharacterized as Catch-Up Contributions to the extent necessary to either (i) exhaust his Excess Elective Deferrals, and/or (ii) increase his Catch-Up Contributions to the applicable limit under Section 414(v) of the Code for the Plan Year.

(ii) Recharacterization to Meet Limits of Section 402(g) of the Code. In the event a Participant's Deferred Compensation Contributions for a Plan Year do not equal the maximum Contributions that may be made under the Plan during that Plan Year for any reason, the Participant's Catch-Up Contributions for such Plan Year shall be recharacterized as Deferred Compensation Contributions for all purposes to the extent necessary to increase his Deferred Compensation Contributions to equal such maximum for such Plan Year.

(iii) Corrective Distributions.

a. **General**. Notwithstanding any other provision of the Plan to the contrary, Excess Elective Deferrals (remaining after recharacterization as discussed above) and income and loss allocable thereto for the applicable calendar year must be distributed no later than April 15 following the calendar year in which Excess Elective Deferrals are incurred to avoid penalty, to Participants who have Excess Elective Deferrals for the preceding calendar year. Provided that, Excess Elective Deferrals to be distributed for a taxable year will be reduced by Excess Contributions previously distributed for the Plan Year beginning in such taxable year. For years beginning after 2005, distribution of Excess Elective Deferrals for a year shall be made first from the Participant's Account holding Deferred Compensation Contributions, to the extent Deferred Compensation Contributions were made for the year, unless the Participant specifies otherwise.

b. **Calculation of Income Allocable to Excess Elective Deferrals**. The Plan Administrator shall use the method provided in Section 5.6 herein for computing the income allocable to corrective distributions pursuant to this Section. Excess Elective Deferrals are determined on a date that is no more than seven (7) days before the distribution. For the Plan Year beginning in 2007, income or loss allocable to the period between the end of the taxable year and the

date of distribution ("gap period") must be taken into account for corrective distributions. For Plan Years beginning after 2007, income or loss applicable to the gap will not be taken into account for corrective distributions.

(c) Catch-up Contributions: For Plan Years beginning after December 31, 2001, all Employees who are eligible to make Deferred Compensation Contributions under this Plan and who have attained age 50 before the close of the Employee's taxable year shall be eligible to make Catch-Up Contributions in accordance with, and subject to the limitations of, Section 414(v) of the Code. Catch-Up Contributions are Deferred Compensation Contributions made to the Plan that are in excess of an otherwise applicable Plan limit and that are made by Participants who are age 50 or over by the end of their taxable years. An otherwise applicable Plan limit is a limit in the Plan that applies to Deferred Compensation Contributions without regard to Catch-Up Contributions, such as the limit on Annual Additions and the Code Section 402(g) limit. Such Catch-Up Contributions shall not be taken into account for purposes of the provisions of the Plan implementing the required limitations of Sections 402(g) and 415 of the Code. The Plan shall not be treated as failing to satisfy the provisions of the Plan implementing the requirements of Section 401(k)(3), 401(k)(11), 401(k)(12), 410(b), or 416 of the Code, as applicable, by reason of the making of such Catch-Up Contributions.

(d) Roth Elective Deferrals:

(i) General Application.

(1) If elected by the Employer in the Joinder Agreement, this Subsection (d) will apply to Contributions beginning with the effective date specified in the adoption agreement but in no event before the first day of the first taxable year beginning on or after January 1, 2006.

(2) As of the effective date under Subsection (1), the Plan will accept Roth elective deferrals made on behalf of Participants. A Participant's Roth elective deferrals will be allocated to a separate account maintained for such deferrals as described in Subsection (ii).

(3) Unless specifically stated otherwise, Roth elective deferrals will be treated as elective deferrals for all purposes under the Plan. Roth elective deferrals that are determined to be excess elective deferrals shall be corrected by distribution in the manner set forth in Section 4.8.

(ii) Separate Accounting.

(1) Contributions and withdrawals of Roth elective deferrals will be credited and debited to the Roth elective deferral account maintained for each Participant.

(2) The Plan will maintain a record of the amount of Roth elective deferrals in each Participant's account.

(3) Gains, losses, and other credits or charges must be separately allocated on a reasonable and consistent basis to each Participant's Roth elective deferral account and the Participant's other accounts under the Plan.

(4) No contributions other than Roth elective deferrals and properly attributable earnings will be credited to each Participant's Roth elective deferral account.

(iii) Direct Rollovers.

(1) Notwithstanding Section 9.5, a direct rollover of a distribution from a Roth elective deferral account under the Plan will only be made to another Roth elective deferral account under an applicable retirement plan described in § 402A(e)(1) or to a Roth IRA described in Code Section 408A, and only to the extent the rollover is permitted under the rules of Code Section 402(c).

(2) Notwithstanding Section 9.5, if elected by the Employer in the Joinder Agreement, the Plan will accept a rollover contribution to a Roth elective deferral account only if it is a direct rollover from another Roth elective deferral account under an applicable retirement plan described in Code Section 402A(e)(1) and only to the extent the rollover is permitted under the rules of Code Section 402(c).

(3) The Plan will not provide for a direct rollover (including an automatic rollover) for distributions from a Participant's Roth elective deferral account if the amount of the distributions that are eligible rollover distributions are reasonably expected to total less than $200 during a year. In addition, any distribution from a Participant's Roth elective deferral account is not taken into account in determining whether distributions from a Participant's other accounts are reasonably expected to total less than $200 during a year. However, eligible rollover distributions from a Participant's Roth elective deferral account are taken into account in determining whether the total amount of the Participant's account balances under the Plan exceeds $1,000 for purposes of mandatory distributions from the plan.

(iv) Definition.

(1) **Roth Elective Deferrals**. A Roth elective deferral is an elective deferral that is:

a. Designated irrevocably by the Participant at the time of the cash or deferred election as a Roth elective deferral that is being made in lieu of all or a portion of the pre-tax elective deferrals the Participant is otherwise eligible to make under the plan; and

b. Treated by the Employer as includible in the Participant's income at the time the Participant would have received that amount in cash if the Participant had not made a cash or deferred election.

ARTICLE V.
Accounting, Allocation and Valuation

5.1 **Accounts**: The Committee shall maintain a separate Municipality Contribution Account, Participant Nondeductible Contribution Account, Participant Mandatory Contribution Account, Participant Deductible Contribution Account, Participant Rollover Account, Participant Deferred Compensation Contribution Account, Catch-Up Contribution Account, Pick-Up Contributions Account and Loan Account as necessary for each Participant. A separate sub-account for each such Account shall be maintained for each Investment Option offered in accordance with Section 5.12. All such Accounts shall be credited or debited as herein provided.

5.2 **Eligibility for Allocation**: Employer contributions together with Amounts Forfeited as of the Valuation Date shall be allocated to the Municipality Contribution Accounts of Participants.

5.3 **Allocation of Contribution**: The Employer contributions, together with Amounts Forfeited as of the prior Valuation Date shall be allocated in the manner elected by the Employer in the Joinder Agreement.

5.4 **Allocation of Amounts Forfeited**: No Amount Forfeited attributable to the contribution of one Employer adopting this Plan may be allocated for the benefit of Participants of the Plan of any other adopting Employer.

5.5 **Value of Account**: The value of a Participant's Account is equal to the sum of all contributions, earnings or losses, and other additions credited to the Account, less all distributions (including distributions to Beneficiaries and to alternate payees and also including disbursement of Plan loan proceeds), forfeitures, expenses and other charges against the Account as of a Valuation Date or other relevant date. For purposes of a distribution under the Plan, the value of a Participant's Account balance is its value as of the Valuation Date immediately preceding the date of the distribution. The value of a Participant's Account is the fair market value of the assets in the account.

5.6 **Allocation of Investment Earnings and Losses**: As of each Valuation Date, the Accounts will be adjusted to reflect the earnings and losses since the last Valuation Date. Earnings or losses will be allocated using the daily valuation method so that earnings or losses will be allocated on each day of the Plan Year for which Plan assets are valued on an established market.

5.7 **Accounting for Participants' Contributions**: Contributions by or on behalf of each Participant shall be credited to his Participant Nondeductible Contribution Account, Participant Mandatory Contribution Account, Participant Deductible Contribution Account, Catch-Up Contribution Account, Pick-Up Contribution Account, or Participant Deferred Compensation Contribution Account as deposited with the Trustee.

5.8 **Accounting for Statement of Account**: As soon as is administratively feasible, the Committee shall present to each Participant a statement of such Participant's Accounts, at least annually, showing the balances at the beginning of the reported period, any changes during the reported period, the balances at the end of the reported period, and such other information as the Committee may determine. However, neither the maintenance of accounts, the allocations to

Accounts, nor the statements of account shall operate to vest in any Participant any right or interest in or to the Fund except as the Plan specifically provides herein.

5.9 **Time of Adjustment**: Each adjustment required by this Article V shall be deemed to have been made at the times specified in this Article V, regardless of the dates of actual entries or receipts by the Trustee of contributions for such Plan Year.

5.10 **Special Valuation Date**: If the Committee determines that a substantial change in the value of any Investment Fund has occurred since the last Valuation Date, the Committee may, prior to the next Valuation Date, establish one or more Special Valuation Dates and determine the adjustment required to make the total net credit balance in the Accounts of the then Participants equal to the then market value of the total assets of the Fund. Such adjustments shall be made consistent with the procedure specified in Section 5.5. Having determined such adjustment, all distributions which are to be made as of or after such special Valuation Date, but prior to the next succeeding Valuation Date or Special Valuation Date, shall be made as if the net credit balances in all Accounts had actually been credited or debited to reflect the adjustment provided by this Section.

5.11 **Limitation on Allocation of Employer Contributions**: The following provisions will be applicable in determining if the Plan and the Employer contributions thereto satisfy the requirements of Section 415 of the Code and the regulations thereunder. Except to the extent permitted under Section 4.8(c) of this Plan and Section 414(v) of the Code, if applicable, the Annual Additions that may be contributed or allocated to a Participant's Accounts under the Plan for any limitation year shall not exceed the Maximum Permissible Amount.

(a) Definitions: For the purposes of this Section the following definitions shall be applicable:

(i) Annual Additions: For purposes of the Plan, "Annual Additions" shall mean the amount allocated to a Participant's Account during the Limitation Year that constitutes:

(1) Employer contributions,

(2) Employee Deferred Compensation Contributions or Roth Contributions (excluding excess deferrals that are distributed in accordance with Treas. Reg. § 1.402(g)-1(e)(2) or (3)),

(3) Forfeitures, and

(4) Amounts allocated to an individual medical account, as defined in Section 415(1)(2) of the Code, which is part of a pension or annuity plan maintained by the Employer are treated as annual additions to a defined contribution plan; and amounts derived from contribution plans or accrued after December 31, 1985, and taxable years ending after such date, which are attributable to post-retirement medical benefits, allocated to the separate account of a key employee, as defined in Section 419(A)(d)(3) of the Code, under a welfare benefit fund, as defined in Section 419(e) of the Code, maintained by the Employer are treated as annual addition to a defined contribution plan.

Annual additions for purposes of Code § 415 shall not include restorative payments. A restorative payment is a payment made to restore losses to a Plan resulting from actions by a fiduciary for which there is reasonable risk of liability for breach of a fiduciary duty under federal or state law, where participants who are similarly situated are treated similarly with respect to the payments. Generally, payments are restorative payments only if the payments are made in order to restore some or all of the Plan's losses due to an action (or a failure to act) that creates a reasonable risk of liability for such a breach of fiduciary duty (other than a breach of fiduciary duty arising from failure to remit contributions to the Plan). This includes payments to a plan made pursuant to a court-approved settlement, to restore losses to a qualified defined contribution plan on account of the breach of fiduciary duty (other than a breach of fiduciary duty arising from failure to remit contributions to the Plan). Payments made to the Plan to make up for losses due merely to market fluctuations and other payments that are not made on account of a reasonable risk of liability for breach of a fiduciary duty are not restorative payments and generally constitute contributions that are considered annual additions.

Annual additions for purposes of Code § 415 shall not include: (1) The direct transfer of a benefit or employee contributions from a qualified plan to this Plan; (2) rollover contributions (as described in Code §§ 401(a)(31), 402(c)(1), 403(a)(4), 403(b)(8), 408(d)(3), and 457(e)(16)); (3) repayments of loans made to a participant from the Plan; and (4) repayments of amounts described in Code § 411(a)(7)(B) (in accordance with Code § 411(a)(7)(C)) and Code § 411(a)(3)(D), as well as Employer restorations of benefits that are required pursuant to such repayments.

If, in addition to this Plan, the Participant is covered under another qualified plan which is a defined contribution plan maintained by the Employer, a welfare benefit fund, as defined in Section 419(e) of the Code maintained by the Employer, or an individual medical benefit account, as defined in Section 415(1)(2) of the Code maintained by the Employer, which provides for Annual Additions during any Limitation Year, then the Annual Additions which may be credited to a Participant's Account under this Plan for any such Limitation Year will not exceed the Maximum Permissible Amount reduced by the Annual Additions credited to a Participant's Account under the other plans and welfare benefit funds for the same Limitation Year. If the Annual Additions with respect to the Participant under other defined contribution plans and welfare benefit plans maintained by the Employer are less than the Maximum Permissible Amount and the Employer contribution that would otherwise be contributed or allocated to the Participant's Account under this Plan would cause the Annual Additions for the Limitation Year to exceed this limitation, the amount contributed or allocated will be reduced so that the Annual Additions under all such plans and funds for the Limitation Year will equal the Maximum Permissible Amount. If the Annual Additions with respect to the Participant under such other defined contribution plans and welfare benefit funds in the aggregate are equal to or greater than the Maximum Permissible amount, no excess amount will be contributed or allocated to a Participant's Account under this Plan for the Limitation Year.

(ii) Actual Compensation: The words "Actual Compensation" shall mean a Participant's wages, salaries, and fees for professional services and other amounts received without regard to whether or not an amount is paid in cash for personal services actually rendered in the course of employment with the Employer, to the extent that the amounts are includible in gross income (or to the extent amounts deferred at the election of the Employee

would be includible in gross income but for the rules of Sections 125, 132 (for limitation years beginning after December 31, 2001), 402(e)(3), 402(h)(1)(B), 402(k), or 457(b) of the Code). These amounts include, but are not limited to, commissions paid salesmen, compensation for services on the basis of a percentage of profits, commissions on insurance premiums, tips and bonuses, fringe benefits, and reimbursements or other expense allowances under a nonaccountable plan as described in Treas. Reg. §1.62-2(c)). For years beginning after December 31, 2008, (i) an individual receiving a differential wage payment, as defined by Code §3401(h)(2), is treated as an employee of the employer making the payment, (ii) the differential wage payment is treated as Actual Compensation, and (iii) the Plan is not treated as failing to meet the requirements of any provision described in Code §414(u)(1)(C) by reason of any contribution or benefit which is based on the differential wage payment.

For purposes of applying the limitations described in this Section 5.11 of the Plan, Compensation paid or made available during such limitation years shall include elective amounts that are not includable in the gross income of the Employee by reason of Code Section 132(f)(4).

Actual Compensation shall be adjusted, as set forth herein, for the following types of compensation paid after a Participant's severance from employment with the Employer maintaining the Plan (or any other entity that is treated as the Employer pursuant to Code § 414(b), (c), (m) or (o)). However, amounts described in Subsections (a) and (b) below may only be included in Actual Compensation to the extent such amounts are paid by the later of 2½ months after severance from employment or by the end of the limitation year that includes the date of such severance from employment. Any other payment of compensation paid after severance of employment that is not described in the following types of compensation is not considered Actual Compensation within the meaning of this Section, even if payment is made within the time period specified above.

(1) **Regular Pay:** Actual Compensation shall include regular pay after severance of employment if:

A. The payment is regular compensation for services during the Participant's regular working hours, or compensation for services outside the Participant's regular working hours (such as overtime or shift differential), commissions, bonuses, or other similar payments; and

B. The payment would have been paid to the Participant prior to a severance from employment if the Participant had continued in employment with the Employer.

(2) **Leave Cashouts and Deferred Compensation:** Leave cashouts shall not be included in Actual Compensation. In addition, deferred compensation shall be included in Actual Compensation.

(3) **Salary Continuation Payments for Disabled Participants:** Actual Compensation does not include compensation paid to a Participant who is permanently and totally disabled (as defined in Code § 22(e)(3)).

(iii) Excess Amount: The words "Excess Amount" shall mean the excess of the Participant's Annual Additions for the applicable Limitation Year over the Maximum Permissible Amount.

(iv) **Maximum Permissible Amount**: The words "Maximum Permissible Amount" shall mean for the applicable Limitation Year, the "maximum permissible amount" (except for Employee Catch-Up Contributions under Section 414(v) of the Code) which may be contributed or allocated to or made with respect to any Participant which amount shall be the lesser of:

(1) $56,000, as adjusted for cost-of-living under Code Section 415(d) the "Defined Contribution Dollar Limitation," or

(2) 100% of the Participant's Actual Compensation for the Limitation Year.

The compensation limitation referred to above shall not apply to: any contribution for medical benefits (within the meaning of Section 419A(f)(2) of the Code) after separation from service which is otherwise treated as an Annual Addition, or any amount otherwise treated as an Annual Addition under Section 415(1)(1) of the Code.

(b) Determination of Excess: If an excess amount was allocated to a Participant on an allocation date of this Plan which coincides with an allocation date of another plan, the excess amount attributed to this Plan will be the product of (1) the total excess amount allocated as of such date times (2) the ratio of (i) the Annual Additions allocated to the Participant for the Limitation Year as of such date under this Plan to (ii) the total Annual Additions allocated to the Participant for the Limitation Year as of such date under this and all other qualified plans which are defined contribution plans.

(c) Treatment of Excess: Notwithstanding any provision of the Plan to the contrary, if the annual additions (within the meaning of Code § 415) are exceeded for any participant, then the Plan may be able to correct such excess in accordance with the Employee Plans Compliance Resolution System (EPCRS) as set forth in Revenue Procedure 2018-52 or any superseding guidance, including, but not limited to, the preamble of the final § 415 regulations. However, EPCRS may not be available in all situations.

5.12 **Investment Options**:

(a) Self-Directed: If the Employer elects in the Joinder Agreement, each Participant in the Plan is hereby given the specific authority to direct the investment of all or any portion of his Accounts in one or more Investment Options provided under this Plan in accordance with the procedures established by the Committee. If a Participant does not designate an Investment Option for his Accounts, his Accounts will be invested in the age-based balanced fund or such other Investment Option as may be designated by the Trustees. For purposes of this Section, the Participants shall be exercising full investment control, discretion, authority and fiduciary responsibility as provided in this Plan of the investments in such Participants' applicable Accounts.

(b) Non-Self-Directed: If the Employer does not elect in the Joinder Agreement to allow self-directed investments, all Accounts will be invested in the Balanced Fund or such other Investment Option as may be designated by the Trustees.

ARTICLE VI.
Benefits

6.1 **Retirement or Disability:** If a Participant's employment with the Employer is terminated when he attains age sixty-five (65), or if a Participant's employment is terminated at an earlier age as the result of a Disability, he shall be entitled to receive the entire amount of his Municipality Contribution Account.

6.2 **Deferred Retirement:** If a Participant, with the consent of the Employer, shall continue in active employment following his Normal Retirement Date, he shall continue to participate under the Plan. Upon actual retirement, such Participant shall be entitled to receive the entire amount of his Municipality Contribution Account as of his actual retirement date.

6.3 **Death of a Participant:** Upon the death of a Participant, his Beneficiary shall be entitled to receive the entire amount of his Municipality Contribution Account and Participant Contribution Accounts as of the date of his death. In the case of a death occurring on or after January 1, 2007, if a Participant dies while performing qualified military service (as defined in Code § 414(u)), the survivors of the Participant are entitled to any additional benefits (other than benefit accruals relating to the period of qualified military service) provided under the Plan as if the Participant had resumed and then terminated employment on account of death.

6.4 **Termination for Other Reasons - Vested Percentage:** If a Participant's employment with the Employer is terminated before his Normal Retirement Date for any reason other than Disability or death, he shall be entitled to an amount equal to the vested percentage of his Municipality Contribution Account. Such vested percentage shall be determined as of the date of termination in accordance with the election of the Employer in the Joinder Agreement.

6.5 **Initial Distribution Date:** The date of initial distribution ("Initial Distribution Date") of a Participant whose employment is terminated and provided that the Participant requests a distribution, shall be as soon as practicable following his termination of employment and he shall be entitled to the vested percentage of his Accounts on such Initial Distribution Date payable in accordance with the provisions of Section 6.10. The portion of the Employer's contribution, the Amounts Forfeited or the periodic adjustment which is allocated to a Participant terminated for the reasons specified in Section 6.4 after such Initial Distribution Date shall be payable in accordance with the method utilized under Section 6.10 as soon as practicable.

6.6 **Determination of Amounts Forfeited:** Upon a distribution pursuant to Section 6.4 or if the Participant incurs a Break in Service, the forfeited percentage of a Participant's Municipality Contribution Account, if any, shall be deducted from the Participant's Account. Such Amounts Forfeited shall become available for allocation in accordance with Item 8 of the Joinder Agreement as of the end of the calendar quarter following the Valuation Period in which the terminated Participant forfeited such amounts.

6.7 **Participant Contribution Accounts:** A Participant shall be fully vested in his Participant Contribution Accounts at all times. A Participant's Contribution Account balances shall be paid to him in connection with the distribution to him of the vested portion of his

Municipality Contribution Account on or after his Initial Distribution Date. Such distributions shall be made in accordance with Section 6.10 and Section 6.8.

6.8 **Withdrawals from Participant's Contribution Accounts:** In accordance with the provisions hereof, a Participant may withdraw all or any part of his Participant Contribution accounts by filing a written application with the Administrator. Such withdrawal shall be effective no sooner than thirty (30) (unless waived by the Participant) but not later than ninety (90) days after the Participant's receipt from the Plan Administrator of a rollover notice required by Code Section 402(f). A Participant who withdraws all or part of his Participant Contribution Account balances shall not forfeit his proportionate share of net income, gains and profits, if any, for the Valuation Periods previously allocated to his Participant Contribution Accounts, nor any portion of his Municipality Contribution Account but the Participant's Contribution Accounts shall not share (to the extent of any withdrawals) in any net income for the Valuation Period in which the withdrawal occurs. For any distribution notice issued in Plan Years beginning after December 31, 2006, any reference to the 90-day maximum notice period prior to distribution in applying the notice requirements of Code §§402(f) (the rollover notice), or 411(a)(11) (Participant's consent to distribution) will become 180 days.

(a) Participant Deductible Contribution Account: If allowed in the Joinder Agreement, a Participant may withdraw all or any part of his Participant Deductible Contribution Account (but not to exceed the amount in his Participant Deductible Contribution Account at the time of withdrawal) by filing a written application with the Plan Administrator. Such withdrawal may be made no more often than once a year. If at the time of the withdrawal the Participant has not attained age 59½ or is not disabled, the Participant will be subject to a federal income tax penalty unless such withdrawal is rolled over to a qualified plan or individual retirement account within sixty (60) days of the date of distribution.

(b) Participant Nondeductible Contribution Account: A Participant may withdraw all or any part of his Participant Nondeductible Contribution Account by filing a written application with the Plan Administrator.

(c) Participant Deferred Compensation Contribution Account: Notwithstanding any other provision of this Plan, no amount in a Participant's Deferred Contribution Account may be distributed to a Participant earlier than such Participant's retirement, death, Disability, or severance from employment. The above distribution requirements shall be strictly interpreted by the Plan Administrator to conform with the requirements of Section 401(k) of the Code and future amendments or Internal Revenue Service interpretations thereof. If a Participant is allowed to withdraw from his Participant Deferred Compensation Contribution Account, the provisions of the first paragraph of this Section 6.8 shall apply to such withdrawals. Notwithstanding the foregoing, for purposes of Code §401(k)(2)(B)(i)(I), effective January 1, 2009, an individual is treated as having been severed from employment during any period the individual is performing service in the uniformed services described in Code §3401(h)(2)(A). If an individual elects to receive a distribution by reason of severance from employment, death or disability, the individual may not make an elective deferral or Employee contribution during the 6-month period beginning on the date of the distribution.

(d) Pick-up Contribution Account: Notwithstanding any other provision of this Plan, no amount in a Participant's Pick-Up Contribution Account may be distributed to a Participant earlier than such Participant's retirement, death, Disability, or separation from service. If a Participant is allowed to withdraw from his Pick-Up Contribution Account, the provisions of the first paragraph of this Section 6.8 shall apply.

6.9 **Withdrawals from Participant's Mandatory Contribution Account:** A Participant may not withdraw any portion of his Participant Mandatory Contribution Account prior to the termination of his employment. Such account balances will be paid at the same time and in the same manner as such Participant's Municipality Contribution Account.

6.10 **Methods of Distribution:** On and after each Participant's Initial Distribution Date, after all adjustments to his Accounts required as of such date shall have been made, distribution of his share shall be made to or for the benefit of the Participant or, in case of his death, to or for the benefit of his Beneficiary, by one of the following methods, as determined by the Committee:

(a) a lump sum distribution;

(b) an installment distribution consisting of approximately equal installments for a term not exceeding ten (10) years;

(c) an installment distribution consisting of approximately equal installments for a term not extending beyond the joint life expectancy (as calculated in accordance with Income Tax Regulation section 1.72-9) on the Initial Distribution Date of the Participant and his spouse;

(d) periodic distributions as designated by the Participant or Beneficiary; or

(e) purchase of an annuity.

Commencement of payments under the method of distribution selected shall be as of the initial Distribution Date of the Participant, provided that for administrative convenience, such commencement may be delayed as reasonably necessary but in no event for more than sixty (60) days after a reasonable time for all administrative calculations, allocations and accounting operations necessary to determine the amount of the distribution. The Committee, in its sole discretion, may accelerate the payment of any unpaid installments. If a former Participant receiving installment payments dies prior to the receipt by him of the full amount to be paid to him from his Participant Accounts, the remaining installments shall be paid to his Beneficiary. Under no circumstance may a method of payment be elected that would be expected to cause more than fifty percent (50%) of the present value of any series of payments to go to a person other than the Participant.

6.11 **Designation of Beneficiary:** Each Participant shall designate his Beneficiary on a form provided by the Committee and such designation may include primary and contingent Beneficiaries. If Participant designates more than one Beneficiary, each shall share equally unless the Participant specifies a different allocation. The designation may be changed at any time by filing a new form with the Committee. In the absence of such written designation, the surviving spouse, if any, of the Participant shall be deemed to be the designated Beneficiary, and otherwise the estate of such Participant. Further, the written designation of the Participant's spouse may be voided upon divorce of the Participant if required by applicable state law. In all events, the date of determination of a Participant's Beneficiary shall be the date of death of a

Participant. Production of a certified copy of the death certificate of any Participant or other persons shall be sufficient evidence of death, and the Committee shall be fully protected in relying thereon.

6.12 **Payments Under a Qualified Domestic Relations Order:**

(a) The Municipality shall follow the terms of any "Qualified Domestic Relations Order" as defined in Subsection (b) below issued with respect to a Participant where such Qualified Domestic Relations Order grants to an "Alternate Payee" rights in the benefit of the Participant.

(b) The term "Qualified Domestic Relations Order" means an order issued by the District Court of the State of Oklahoma pursuant to the domestic relations laws of the State of Oklahoma which relates to the provision of marital property rights to a spouse or former spouse of a Participant and which creates or recognizes the existence of an Alternate Payee's right to, or assigns to an Alternate Payee the right to receive a portion of the benefits payable with respect to a Participant of the Plan.

(c) To qualify as an Alternate Payee, a spouse or former spouse must have been married to the Participant for a period of not less than thirty (30) continuous months immediately preceding the commencement of the proceedings from which the Qualified Domestic Relations Order issues.

(d) A Qualified Domestic Relations Order is valid and binding on the Trustees and the Participant only if it meets the requirements of this Section.

(e) A Qualified Domestic Relations Order shall clearly specify:

1) the name, social security number, and last-known mailing address (if any) of the Participant, and the name and mailing address of the alternative payee covered by the order;

2) the amount or percentage of the Participant's benefits to be paid by the Plan to the Alternate Payee;

3) the characterization of the benefit as to marital property rights, and whether the benefit ceases upon the death or remarriage of the Alternate Payee; and,

4) each plan to which such order applies.

(f) A Qualified Domestic Relations Order meets the requirements of this Section only if such order:

1) does not require the Plan to provide any type or form of benefit, or any option not otherwise provided under the Plan;

2) does not require the Plan to provide increased benefits; and,

3) does not require the payment of benefits to an Alternate Payee which are required to be paid to another Alternate Payee pursuant to another order previously determined to be a Qualified Domestic Relations Order, or an order recognized by the Plan as a valid order prior to the effective date of the Plan.

(g) A Qualified Domestic Relations Order shall not require payment of benefits to an Alternate Payee prior to the actual retirement date or withdrawal of the related member.

(h) In the event a Qualified Domestic Relations Order requires the benefits payable to an Alternate Payee to terminate upon the remarriage of said Alternate Payee, the Plan shall terminate said benefit only upon the receipt of a certified copy of a marriage license, or a copy of a certified order issued by the Court that originally issued said Qualified Domestic Relations Order declaring the remarriage of said Alternate Payee.

(i) This Section of the Plan shall not be subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), 29 U.S.C.A. Section 1001, et seq., as amended from time to time, or rules and regulations promulgated thereunder, and court cases interpreting said Act.

(j) Effective on or after April 6, 2007, a domestic relations order that otherwise satisfies the requirements for a QDRO will not fail to be a QDRO: (i) solely because the order is issued after, or revises, another domestic relations order or QDRO; or (ii) solely because of the time at which the order is issued, including issuance after the annuity starting date.

(k) The Board of Trustees of the Oklahoma Municipal Retirement Fund shall promulgate such rules as are necessary to implement the provisions of this Section.

(l) An Alternate Payee who has acquired beneficiary rights pursuant to a valid Qualified Domestic Relations Order must fully comply with all provisions of the rules promulgated by the Trustees pursuant to this Section in order to continue receiving his or her benefits.

(m) Nothing in this Section shall grant a spouse or former spouse of a Participant any property rights in the benefits of any Participant except as specifically authorized for Qualified Domestic Relations Orders, and no spousal consent shall be required for a Participant to elect or change elections pertaining to a benefit payable under this Plan.

6.13 **Loans to Participants:**

(a) General: The Committee, in its sole discretion, may direct Trustees to make loans to Participants upon the written direction and application of the Participant who desires to effect such loan, up to 50% of the vested balance of a Participant's Accounts. All such loans (i) shall not be made available to Highly Compensated Employees (as defined in Section 414(q) of the Code) in an amount greater than the amount made available to other Employees, (ii) shall be available to all Participants on a nondiscriminatory basis, (iii) shall be made available in an amount equal to the lesser of 50% of the borrowing Participant's vested Benefit in his Account or $50,000, (iv) shall bear a reasonable rate of interest which will be established by the Committee, (v) shall be secured by the borrowing Participant's Benefit account balance attributable to his Account, (vi) shall be amortized and repaid in level payments of principal and

interest made not less frequently than monthly over the term of the loan, (vii) shall be repaid by payroll reduction while the Participant is employed; (viii) shall accelerate and be due in full on the date a Participant terminates employment with the Employer; (ix) shall not be less than $1,000 in amount each; and (x) shall be made upon such other reasonable terms which the Committee shall designate, such terms being applied in a nondiscriminatory fashion; provided, in no event shall any loan have a term in excess of five years. There shall not be more than one or two loans outstanding (as elected by the Employer) at any time with respect to a Participant. No Participant who has borrowed from the Plan may make another loan until the previous loan has been fully repaid. Outstanding loans are not subject to refinancing by a new loan. Upon direction by the Committee, and subject to Subsection (c) below, the Trustees may foreclose upon such Participant's interest in his Account in the event of default. A loan to a Participant, when added to the outstanding balance of all other loans to the Participant from the Plan and other plans sponsored by the Employer, cannot exceed $50,000, reduced by the excess of the highest outstanding balance of loans from the Plan (and all other plans sponsored by the Employer) during the one-year period ending on the day before the date the loan is made over the outstanding balance of the loans from the Plan on the date the loan is made. No distribution of a Benefit shall be made to any Participant, Beneficiary or the estate of a Participant unless and until all unpaid loans made by the Plan to such Participant together with accrued interest have been paid in full. In determining if any of the foregoing limitations regarding the making of loans to Participants, loans made under all other plans (i) sponsored by the Employer and (ii) qualified under Sections 401(a) and 501(a) of the Code will be considered. All costs and expenses of any loan will be charged to the applicable Accounts of the Participant.

(b) Establishment of Loan Account: At such time as it is determined that a Participant is to receive a loan from the Plan, the loan shall be made from the Participant's applicable Account in the order and precedence indicated hereafter and such amount shall be deemed to be credited to the Participant's Loan Account with a corresponding debit to occur to his Account: (i) first, an Account holding Employer contributions, including "rollover contributions" (other than Deferred Compensation Contributions, if applicable); (ii) second, an Account holding Deferred Compensation Contributions, if applicable; and (iii) third, an Account holding contributions picked up and assumed by the Employer pursuant to Section 4.7 of this Plan. All interest payments to be made pursuant to the terms and provisions of the loan shall be credited to the applicable Account in such a manner so that the Loan Account will reflect unpaid principal and interest from time to time. The earnings attributable to the Loan Account shall be allocable only to the Loan Account of such Participant and shall not be considered as general earnings of the Trust Fund to be allocated to the other Participants therein as provided herein. Other than for the limited purposes of establishing a separate account for the allocation of the interest thereto, a Participant's Loan Account shall, for all other purposes, be considered as part of his applicable Account.

(c) Foreclosure of Loan Account: The Trustees may foreclose upon such Participant's interest in his Account in the event of default under the loan made to the Participant under this Section.

(d) Special Restrictions on Foreclosure: In the event of default under a loan made under this Section, foreclosure under the promissory note evidencing such loan and attachment of the Participant's interest in his applicable Accounts shall occur within a reasonable time

following the event of default; provided, with respect to any portion of a loan secured by amounts governed under Section 401(k) of the Code, if applicable, foreclosure on such 401(k) amounts shall not occur until the occurrence of an event described under Section 401(k) of the Code which would otherwise permit a distribution to be made from the Plan.

(e) Establishment of Loan Program: The Trustees are hereby authorized and directed to establish a "loan program" (the "Loan Program") and the Trustees are further authorized to delegate to the Committee the duties and responsibilities with regard to the implementation of the Loan Program as adopted by the Trustees for and on behalf of the Plan. The Loan Program shall be considered to be a part of this Plan for the purposes stated in the Loan Program.

(f) Loan Account: The words "Loan Account" shall mean a Participant's separate Account established in the event he desires to make a loan from his applicable Account as provided in this Section 6.13.

6.14 **Required Minimum Distributions:** The provisions of this Section 6.14 will apply for purposes of determining Required Minimum Distributions for distribution calendar years beginning with the 2003 calendar year, as well as Required Minimum Distributions for the 2002 Distribution Calendar Years that are made on or after August 1, 2002. The requirements of this Section will take precedence over any inconsistent provisions of the Plan. All distributions required under this Section will be determined and made in accordance with the Treasury regulations under Section 401(a)(9) and the minimum distribution incidental benefit requirement of Section 401(a)(9)(G) of the Internal Revenue Code. Notwithstanding the other provisions of this Section, distributions may be made under a designation made before January 1, 1984, in accordance with Section 242(b)(2) of the Tax Equity and Fiscal Responsibility Act (TEFRA) and the provisions of the Plan that relate to Section 242(b)(2) of TEFRA.

(a) Limits on Distribution Periods: As of the first distribution calendar year, distributions, if not made in a single-sum, may only be made over one of the following periods (or a combination thereof): (1) the life of the participant; (2) the life of the participant and a designated beneficiary; (3) a period certain not extending beyond the life expectancy of the participant; or (4) a period certain not extending beyond the joint and last survivor expectancy of the participant and a designated beneficiary.

(b) Time and Manner of Distribution:

(i) Required Beginning Date. The Participant's entire interest will be distributed, or begin to be distributed, to the Participant no later than the Participant's Required Beginning Date. For purposes of this Section, the "Required Beginning Date" of a Participant is the April 1 of the calendar year following the later of the calendar year in which the Participant attains age 70½ or the calendar year in which the Participant retires.

(ii) Death of Participant Before Distributions Begin. If the Participant dies before distributions begin, the Participant's entire interest will be distributed, or begin to be distributed, no later than as follows:

(1) If the Participant's surviving spouse is the Participant's sole

designated Beneficiary, then, distributions to the surviving spouse will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died, or by December 31 of the calendar year in which the Participant would have attained age 70½, if later.

(2) If the Participant's surviving spouse is not the Participant's sole designated Beneficiary, then, distributions to the designated Beneficiary will begin by December 31 of the calendar year immediately following the calendar year in which the Participant died.

(3) If there is no designated Beneficiary as of September 30 of the year following the year of the Participant's death, the Participant's entire interest will be distributed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(4) If the Participant's surviving spouse is the Participant's sole designated Beneficiary and the surviving spouse dies after the Participant but before distributions to the surviving spouse begin, this Subsection (ii), other than Subsection (ii)(1), will apply as if the surviving spouse were the Participant.

For purposes of this Subsection (ii) and Subsection (d), unless Subsection (ii)(1) applies, distributions are considered to begin on the Participant's Required Beginning Date. If Subsection (ii)(1) applies, distributions are considered to begin on the date distributions are required to begin to the surviving spouse under Subsection (ii)(4). If distributions under an annuity purchased from an insurance company irrevocably commence to the Participant before the Participant's Required Beginning Date (or to the Participant's surviving spouse before the date distributions are required to begin to the surviving spouse under Subsection (ii)(4)), the date distributions are considered to begin is the date distributions actually commence.

(iii) Forms of Distribution. Unless the Participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the Required Beginning Date, as of the first distribution calendar year distributions will be made in accordance with Subsections (c) and (d) of this Section. If the Participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder will be made in accordance with the requirements of Section 401(a)(9) of the Code and the Treasury regulations.

(c) Required Minimum Distributions During Participant's Lifetime:

(i) Amount of Required Minimum Distribution For Each Distribution Calendar Year. During the Participant's lifetime, the minimum amount that will be distributed for each distribution calendar year is the lesser of:

(1) the quotient obtained by dividing the Participant's Account balance by the distribution period in the Uniform Lifetime Table set forth in Section 1.401(a)(9)-9, Q&A-2, of the Treasury regulations, using the Participant's age as of the Participant's birthday in the distribution calendar year; or

(2) if the Participant's sole designated Beneficiary for the distribution calendar year is the Participant's spouse, the quotient obtained by dividing the Participant's Account balance by the number in the Joint and Last Survivor Table set forth in Section

1.401(a)(9)-9, Q&A-3, of the Treasury regulations, using the Participant's and spouse's attained ages as of the Participant's and spouse's birthdays in the distribution calendar year.

(ii) Lifetime Required Minimum Distributions Continue Through Year of Participant's Death. Required minimum distributions will be determined under this Subsection (c) beginning with the first distribution calendar year and up to and including the distribution calendar year that includes the Participant's date of death.

(d) Required Minimum Distributions After Participant's Death:

(i) Death On or After Date Distributions Begin.

(1) Participant Survived by Designated Beneficiary. If the Participant dies on or after the date distributions begin and there is a designated Beneficiary, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's Account balance by the longer of the remaining life expectancy of the Participant or the remaining life expectancy of the Participant's designated Beneficiary, determined as follows:

a. The Participant's remaining life expectancy is calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.

b. If the Participant's surviving spouse is the Participant's sole designated Beneficiary, the remaining life expectancy of the surviving spouse is calculated for each distribution calendar year after the year of the Participant's death using the surviving spouse's age as of the spouse's birthday in that year. For distribution calendar years after the year of the surviving spouse's death, the remaining life expectancy of the surviving spouse is calculated using the age of the surviving spouse as of the spouse's birthday in the calendar year of the spouse's death, reduced by one for each subsequent calendar year.

c. If the Participant's surviving spouse is not the Participant's sole designated Beneficiary, the designated Beneficiary's remaining life expectancy is calculated using the age of the Beneficiary in the year following the year of the Participant's death, reduced by one for each subsequent year.

(2) No Designated Beneficiary. If the Participant dies on or after the date distributions begin and there is no designated Beneficiary as of September 30 of the year after the year of the Participant's death, the minimum amount that will be distributed for each distribution calendar year after the year of the Participant's death is the quotient obtained by dividing the Participant's Account balance by the Participant's remaining life expectancy calculated using the age of the Participant in the year of death, reduced by one for each subsequent year.

(ii) Death Before Date Distributions Begin.

(1) Participant Survived by Designated Beneficiary. If the Participant dies before the date distributions begin and there is a designated Beneficiary, the minimum amount that will be distributed for each distribution calendar year after the year of the

Participant's death is the quotient obtained by dividing the Participant's Account balance by the remaining life expectancy of the Participant's designated Beneficiary, determined as provided in Subsection (i).

(2) **No Designated Beneficiary**. If the Participant dies before the date distributions begin and there is no designated Beneficiary as of September 30 of the year following the year of the Participant's death, distribution of the Participant's entire interest will be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(3) **Death of Surviving Spouse Before Distributions to Surviving Spouse Are Required to Begin**. If the Participant dies before the date distributions begin, the Participant's surviving spouse is the Participant's sole designated Beneficiary, and the surviving spouse dies before distributions are required to begin to the surviving spouse under Subsection (b)(ii)(1), this Section 6.14(ii) will apply as if the surviving spouse were the Participant.

(e) Definitions:

(i) **Designated Beneficiary**. The individual who is designated as the Beneficiary under Section 6.11 of the Plan and is the designated Beneficiary under Section 401(a)(9) of the Internal Revenue Code and Section 1.401(a)(9)-4 of the Treasury regulations.

(ii) **Distribution Calendar Year**. A Calendar Year for which a minimum distribution is required. For distributions beginning before the Participant's death, the first Distribution Calendar Year is the calendar year immediately preceding the Calendar Year which contains the Participant's Required Beginning Date. For distributions beginning after the Participant's death, the first Distribution Calendar Year is the calendar year in which distributions are required to begin under Subsection (b)(ii). The Required Minimum Distribution for the Participant's first Distribution Calendar Year will be made on or before the Participant's Required Beginning Date. The Required Minimum Distribution for other Distribution Calendar Years, including the Required Minimum Distribution for the Distribution Calendar Year in which the Participant's Required Beginning Date occurs, will be made on or before December 31 of that distribution calendar year.

(iii) **Life Expectancy**. Life Expectancy as computed by use of the Single Life Table in Section 1.401(a)(9)-9, Q&A-1 of the Treasury regulations.

(iv) **Participant's Account Balance**. The Account Balance as of the last valuation date in the calendar year immediately preceding the distribution calendar year (valuation calendar year) increased by the amount of any contributions made and allocated or forfeitures allocated to the Account Balance as of dates in the valuation calendar year after the valuation date and decreased by distributions made in the valuation calendar year after the valuation date. The Account Balance for the valuation calendar year includes any amounts rolled over or transferred to the Plan either in the valuation calendar year or in the distribution calendar year if distributed or transferred in the valuation calendar year.

6.15 **Withdrawals from Participant Rollover Account:** A Participant may request and receive a distribution from his Participant Rollover Account at any time, even if he or she has not terminated employment, unless the rollover was from a defined benefit retirement plan sponsored by the Employer.

ARTICLE VII.
Notices

7.1 **Notice to Oklahoma Municipal Retirement Fund:** As soon as practicable after a Participant ceases to be in the employ of the Employer, the Committee shall give written notice to the Oklahoma Municipal Retirement Fund. The notice shall include such of the following information and directions as are necessary or advisable under circumstances:

(a) name and address of the Participant;

(b) reason he ceased to be in the Employer's employ;

(c) name and address of the Beneficiary or Beneficiaries in case of Participant's death;

(d) percentage or amount to which such Participant is entitled in case of termination of employment;

(e) time, manner and amount of payments to be made to such Participant; and

(f) information required to complete the Trustee's Withholding Election Form.

As soon as practicable after the Committee learns of the death of a Participant, it shall give like notice to the Oklahoma Municipal Retirement Fund.

7.2 **Subsequent Notices:** At any time and from time to time after giving the notice as provided for in Section 7.1, the Committee may modify such original notice or any subsequent notice by means of a further written notice or notices to the Oklahoma Municipal Retirement Fund, but any action taken or payments made by the Oklahoma Municipal Retirement Fund pursuant to a prior notice shall not be affected by a subsequent notice.

7.3 **Copy of Notice:** A copy of each notice provided for in Sections 7.1 and 7.2 shall be mailed by the Committee to the Participant or to each Beneficiary involved, as the case may be, but if, for any reason, such copy is not sent or received, that fact shall not affect the validity of any notice to the Oklahoma Municipal Retirement Fund nor the validity of any action taken or payment made pursuant thereto.

7.4 **Reliance Upon Notice:** Upon receipt of any notice as provided in this Article VII, the Oklahoma Municipal Retirement Fund shall promptly take whatever action and make whatever payments are called for therein, it being intended that the Oklahoma Municipal Retirement Fund may rely upon the information and directions in such notice absolutely and without question. However, the Oklahoma Municipal Retirement Fund may call to the attention of the Committee any error or oversight which the Oklahoma Municipal Retirement Fund believes to exist in any notice.

ARTICLE VIII.
Amendment and Termination

8.1 **Termination of Plan:** The Employer may at any time, effective as specified, terminate the Plan and may direct and require the Oklahoma Municipal Retirement Fund to liquidate the Fund. In the event the Employer shall for any reason cease to exist, the Plan shall terminate and the Fund shall be liquidated. In the event of the termination, partial termination, or complete discontinuance of contributions hereunder, the Account balances of each Participant will become nonforfeitable.

8.2 **Suspension and Discontinuance of Contributions:** If the governing body of the Employer decides it is impossible or inadvisable to continue to make contributions to the Plan, it shall have the power by appropriate resolution or decision to:

(a) suspend contributions to the Plan;

(b) discontinue contributions to the Plan; or

(c) terminate the Plan.

Suspension shall be a temporary cessation of contributions and shall not constitute or require a termination of the Plan. A discontinuance of contributions shall not constitute a formal termination of the Plan and shall not preclude later contributions but all Municipality Contribution Accounts not theretofore fully vested shall become fully vested in the respective Participants notwithstanding the provisions of Section 6.4. In such event, Employees who become eligible to enter the Plan subsequent to the discontinuance shall receive no benefits. After the date of a discontinuance of contributions, the Trust shall remain in existence as provided in this Section 8.2 and the provisions of the Plan and Trust shall remain in force. A certified copy of such decision or resolution shall be delivered to the Oklahoma Municipal Retirement Fund, and as soon as possible thereafter the Oklahoma Municipal Retirement Fund shall send or deliver to each Participant or Beneficiary concerned a copy thereof.

8.3 **Liquidation of Trust Fund:** Upon a complete termination or upon a partial termination of the Plan, unless the Employer's successor shall elect to continue the Plan, the Accounts of all Participants and Beneficiaries shall thereupon be and become fully vested. Upon a complete termination, the Oklahoma Municipal Retirement Fund shall convert the proportionate interest of such Participants and Beneficiaries in the Trust Fund to cash and, after deducting all charges and expenses, the Oklahoma Municipal Retirement Fund shall adjust the balances of such Accounts as provided in Section 5.5 treating the termination date as the current Valuation Date.

Thereafter, the Oklahoma Municipal Retirement Fund shall distribute as soon as administratively feasible the amount to the credit of each such Participant and Beneficiary as the Committee shall direct.

8.4 **Amendments:** Each Employer agrees to adopt any amendments to this Plan which are necessary for an initial or continued determination that the Plan is a qualified, tax exempt plan under Sections 401(a) and 501(a) of the Code. Any such amendments will be an amendment of the Employer's separate Plan if approved by the Trustee. The Employer may amend its separate

Plan in any respect and at any time, subject to the limitations of the Plan, by amendment of or addition to the Joinder Agreement. However, the Oklahoma Municipal Retirement Fund reserves the right to approve all Employer amendments.

8.5 **Provider's Power to Amend for Adopting Employers:** The Provider, as defined in section 4.08 of Rev. Proc. 2017-41, may amend any part of the Plan. However, for purposes of reliance on an Opinion Letter (as defined in Rev. Proc. 2017-41), the Provider will no longer have the authority to amend the Plan on behalf of the Employer as of the date (1) the Employer amends the Plan to incorporate a type of plan described in section 6.03 of Rev. Proc. 2017-41 that is not permitted under the Pre-Approved Plan program, or (2) the Internal Revenue Service notifies the Employer, in accordance with section 8.06(3) of Rev. Proc. 2017-41, that the Plan is an individually designed plan due to the nature and extent of Employer amendments to the Plan.

ARTICLE IX.
Employment Transfers

9.1 **Transfers from This Plan:**

(a) To Another Category with This Employer: If a Participant is employed by the Employer and is transferred to employment with this Employer but under another department, classification or category, so that he is no longer eligible to participate in this Plan, such participation shall thereupon cease and his Account balance shall remain in the Fund and will continue to accrue interest but he will not continue to accrue Service for the purpose of additional vesting credit for benefits under this Plan. However, if an Employee participates in any other plan sponsored by the Employer within the Fund, he or she will continue to accrue service under this Plan for vesting purposes only.

(b) To Another Municipality: If a Participant's employment by the Employer is terminated by virtue of his transfer to employment with another Municipality, his membership in this Plan shall thereupon cease and he shall be subject to the following rules and requirements relating to this Plan and his right and benefits hereunder, to-wit:

(i) if he is fully vested under this Plan as of the date of such employment transfer, he shall be entitled to take any distribution, full or partial, without any effect on his current vesting status; or

(ii) if he is not fully vested under this Plan as of the date of such employment transfer, and he is, immediately upon such transfer of employment, covered by the retirement system under which such other Municipality participates in the Oklahoma Municipal Retirement Fund, he will continue to accrue Service for the purpose of additional vesting credit for benefits under this Plan. However, upon any distribution (that would not be optional to an active Employee), full or partial, vesting will stop and any unvested balance, if any, will be forfeited.

9.2 **Transfers to This Plan:**

(a) From Another Category with This Employer: If a person becomes a Participant immediately upon his transfer from full-time, regular employment with this Employer under another department, classification or category where he is ineligible for membership only because of the type of such employment, his Service accrued by virtue of such prior employment shall not be counted in determining his vesting credit for benefits hereunder.

(b) From Another Municipality: If a person becomes a Participant immediately upon his transfer from full-time, regular employment with a Municipality other than this Employer, his Service accrued by virtue of such prior employment shall be counted in determining his vesting credit for benefits hereunder, and he shall also be subject to all the other provisions of this Plan. A Participant's eligibility for membership under this Plan will be determined by applying the eligibility requirements in the Joinder Agreement as though the date which his credited Service from the other Municipality began was his date of employment with this Employer. Service from such prior employment will however be ignored in its entirety upon any distribution from that Municipality, full or partial, if taken prior to its full vesting.

(c) **Previously Fully Vested With Another Municipality:** With respect to a Participant who was previously 100% vested in any other Municipality's qualified retirement plan prior to becoming a Participant in this Plan, such Participant's "Service" for purposes of determining years of service for vesting under this Plan shall include the Participant's last continuous period during which the Participant was an Employee of the other Municipality.

9.3 **Notice of Transfers:** Immediately after any transfer of employment referred to in Sections 9.1 or 9.2, the transferred Participant shall give written notice of such transfer to the Authorized Agent on a form furnished by the Authorized Agent. Such Participant shall not be penalized, however, for failure to give such notice. The Authorized Agent shall give immediate notice in writing of such transfers to the Trust Service Provider and the Committee.

9.4 **Transfer from Other Qualified Plans:** The Employer may cause to be transferred to the Oklahoma Municipal Retirement Fund all or any of the assets held in respect to any plan or trust which satisfied the applicable requirements of the Code relating to qualified plans and trusts, which is maintained by the Employer for the benefit of its Employees. Any such assets so transferred shall be accompanied by written instructions from the Employer, or the trustee or custodian or the individual holding such assets, setting forth the Participants for whose benefit such assets have been transferred and showing separately the respective contributions by the Employer and by the Participants and the current value of the assets attributable thereto. Upon receipt of such assets and instructions the Oklahoma Municipal Retirement Fund shall thereafter proceed in accordance with the provisions of the Fund.

9.5 **Rollover Contributions:** A Participant who is or was entitled to receive an eligible rollover distribution, as defined in Code Section 402(c)(4) and Treasury Regulations issued thereunder, from a qualified plan described in Section 401(a) or 403(a) of the Code (including after-tax employee contributions), an annuity contract described in Section 403(b) of the Code (including after-tax employee contributions, or an eligible plan under Section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state, or an individual retirement account may elect to contribute all or any portion of such distribution to the Trust directly from such qualified plan, annuity contract or eligible plan, or within 60 days of receipt of such distribution to the Participant. Rollover Contributions shall only be made in the form of cash, or, if and to the extent permitted by the Employer with the consent of the Trustee, promissory notes evidencing a plan loan to the Participant; provided, however, that Rollover Contributions shall only be permitted in the form of promissory notes if the Plan otherwise provides for loans.

The Committee shall develop such procedures and require such information from Participants as it deems necessary to ensure that amounts contributed under this Section 9.5 meet the requirements for tax-deferred rollovers established by this Section 9.5 and by Code Section 402(c). No Rollover Contributions may be made to the Plan until approved by the Committee.

If a Rollover Contribution made under this Section 9.5 is later determined by the Administrator not to have met the requirements of this Section 9.5 or of the Code or Treasury regulations, then, within a reasonable time after such determination is made, the amounts then held in the Trust attributable to such Rollover Contribution shall be distributed to the Employee.

A Participant's Rollover Contributions Account shall be subject to the terms of the Plan except as otherwise provided in this Section 9.5.

Notwithstanding any other provision of this Section 9.5, the Employer may direct the Trustee not to accept Rollover contributions.

9.6 **Transfer to Other Qualified Plans:** The Employer, by written direction to the Oklahoma Municipal Retirement Fund, may transfer some or all of the assets held under the Fund to another plan or trust meeting the requirements of the Code relating to qualified plans and trusts. In the case of any merger or consolidation with, or transfer of assets and liabilities to, any other plan, provisions shall be made so that each Participant in the Plan on the date thereof (if the Plan then terminated) would receive a benefit immediately after the merger, consolidation or transfer which is equal to or greater than the benefit he would have been entitled to receive immediately prior to the merger, consolidation or transfer (if the Plan had then terminated).

9.7 **Rollover to Another Plan or IRA:**

(a) General: Notwithstanding any provision of the Plan to the contrary that would otherwise limit a Distributee's election under this Section, a Distributee may elect, at the time and in the manner prescribed by the Committee, to have any portion of an Eligible Rollover Distribution paid directly to an Eligible Retirement Plan specified by the Distributee in a Direct Rollover. The Committee shall establish procedures for implementing such Direct Rollover distribution.

(b) Definitions: For purposes of this Section 9.7, the following definitions shall apply:

(i) "Eligible Rollover Distribution": An "Eligible Rollover Distribution" is any distribution of all or any portion of the balance to the credit of the Distributee, except that an Eligible Rollover Distribution does not include: any distribution that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the Distributee or the joint lives (or joint life expectancies) of the Distributee and the Distributee's designated Beneficiary, or for a specified period of 10 years or more; any distribution to the extent such distribution is required under Section 401(a)(9) of the Code; the portion of any distribution that is not includable in gross income (determined without regard to the exclusion for net unrealized appreciation with respect to Employer Stock); and any distributions attributable to a hardship. With respect to distributions made after December 31, 2001, for purposes of the direct rollover provisions in Section 9.7 of the Plan, a portion of a distribution shall not fail to be an eligible rollover distribution merely because the portion consists of after-tax employee contributions which are not includible in gross income. However, such portion may be transferred only to (i) an individual retirement account or annuity described in Section 408(a) or (b) of the Code or, effective for distributions on or after January 1, 2008, a Roth individual retirement account of annuity described in Section 408A of the Code, or (ii) a qualified defined contribution plan described in Section 401(a) or 403(a) of the Code that agrees to separately account for amounts so transferred, including separately accounting for the portion of such distribution which is includible in gross income and the portion of such distribution which is not so includible.

(ii) **"Eligible Retirement Plan"**: An "Eligible Retirement Plan" is an individual retirement account described in Section 408(a) of the Code, an individual retirement annuity described in Section 408(b) of the Code, an annuity plan described in Section 403(a) of the Code, or a qualified plan described in Section 401(a) of the Code, an annuity contract described in Section 403(b) of the Code and an eligible plan under Section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and which agrees to separately account for amounts transferred into such plan from this Plan; or, effective January 1, 2008, a Roth IRA described in Code Section 408A(b), that accepts the Distributee's Eligible Rollover Distribution. However, in the case of an Eligible Rollover Distribution to the surviving spouse or a Participant's surviving Beneficiary, an Eligible Retirement Plan is an individual retirement account or individual retirement annuity. The definition of Eligible Retirement Plan shall also apply in the case of a distribution to a surviving spouse, or to a spouse or former spouse who is the alternate payee under a qualified domestic relation order, as defined in Section 414(p) of the Code. If any portion of an Eligible Rollover Distribution is attributable to payments or distributions from a designated Roth account, an Eligible Retirement Plan with respect to such portion shall include only another designated Roth account of the individual from whose account the payments or distributions were made, or a Roth IRA of such individual. In the case of a nonspouse beneficiary, the direct rollover may be made only to an individual retirement account or annuity described in Code Section 408(a) or 408(b) ("IRA") that is established on behalf of the designated Beneficiary and that will be treated as an inherited IRA pursuant to the provisions of Code Section 402(c)(ii). Further, the determination of any required minimum distribution under Code Section 401(a)(9) that is ineligible for rollover shall be made in accordance with IRS Notice 2007-7, Q&A 17 and 18, 2007-5 I.R.B. 395.

(iii) **"Distributee"**: A "Distributee" includes a Participant or former Participant. In addition, the Participant's spouse or former Participant's surviving spouse or surviving Beneficiary (effective January 1, 2007) and the Participant's or former Participant's spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in Section 414(p) of the Code, are distributees with regard to the interest of the spouse or former spouse.

(iv) **"Direct Rollover"**: A "Direct Rollover" is a payment by the Plan directly to the Eligible Retirement Plan specified by the Distributee.

9.8 **Requirements for Rollover by Individuals:** An Employee (whether or not a Participant under this Plan), who, as a result of a termination of another plan qualified under Section 401(a) of the Code, a termination of employment, disability or attainment of age 59½ years, has had distributed to him his entire interest in a plan which meets the requirements of Section 401(a) of the Code (hereinafter referred to as the "Other Plan") may, in accordance with procedures approved by the Committee, transfer all or any part of the distribution received from the Other Plan to the Trustees under this Plan, provided the following conditions are met:

(a) the transfer occurs on or before the 60th day following his receipt of the distribution from the Other Plan, or, if such distribution had previously been deposited in an individual retirement account (as defined in Section 408 of the Code), the transfer occurs on or

before the 60th day following his receipt of such distribution, plus earnings thereon from such individual retirement account;

(b) the distribution from the Other Plan qualifies as a lump sum distribution within the meaning of Subsection 402(e)(4)(A) of the Code or is a result of a termination of another plan qualified under Section 401(a) of the Code; and

(c) the amount transferred shall not exceed the distribution he received from the Other Plan, less the amount, if any, considered contributed by him in accordance with Subsection 402(e)(4)(D)(i) of the Code, plus earnings thereon during the period, if any, in which the amount was held in an individual retirement account.

9.9 **Transfers From Another Qualified Plan:**

(a) With respect to an Employee (whether or not a Participant under this Plan), who has an undistributed account balance in another plan which meets the requirements of Section 401(a) of the Code (hereinafter referred to as the "Other Plan"), the Committee may, in its sole discretion, approve a direct transfer of such account balance from the Other Plan to the Trustees under this Plan.

(b) If the Plan receives a direct transfer (by merger or otherwise) of elective contributions (or amounts treated as elective contributions) under a plan with a Section 401(k) arrangement, the distribution restrictions of Sections 401(k)(2) and (10) of the Code continue to apply to those transferred elective contributions.

9.10 **Procedures:** With respect to transfers under either Section 9.8 or 9.9 herein, the Committee shall develop such procedures, and may require such information from an Employee or the fiduciaries of the Other Plan desiring to make such a transfer, as it deems necessary or desirable to determine that the proposed transfer will meet requirements of this Article and the law. Upon approval by the Committee, the amount transferred shall be deposited in the Trust Fund and shall be credited to a Rollover Account established in the Employee's name. Such Account shall be 100% vested in and nonforfeitable by the Employee, shall share in increases and decreases thereon determined in accordance with the Plan, but shall not share in Employer Contributions or Forfeitures. Upon termination of employment, the total amount of Employee's Participant Rollover Account shall be distributed as part of his Benefit.

ARTICLE X.
Administration

10.1 **Administration:** The Plan shall be administered by the Committee which is hereby created and established and which shall be composed of the members of the City Council of the Employer. The duties of the Committee shall be performed without compensation other than the compensation, if any, which they receive as officers of the Employer unless additional compensation is specifically provided for by action of the City Council. Any usual and reasonable expenses incurred by the Committee in the administration of this Fund and Plan shall be paid by the Employer.

(a) Committee: The Committee shall have such powers as may be necessary to discharge its duties hereunder and under the document creating the Oklahoma Municipal Retirement Fund, and under the contract for the pooling of the Fund with similar funds of other Municipalities. Such powers shall include but not be limited to the following powers and duties:

(1) to delegate to, specify, direct, and supervise the performance of duties of the Authorized Agent, as the agent of the Employer and Committee in matters relating to the Plan, the Fund, and the Oklahoma Municipal Retirement Fund, including but not limited to, the duties set forth below in Subsection 10.1(b) and including any duties of the Employer under the Plan, or as set forth in this Subsection 10.1(a);

(2) acting by direction to the Authorized Agent to file a petition for nomination, or otherwise nominate, and cause the ballot for the election of Trustees of the Oklahoma Municipal Retirement Fund;

(3) to construe and interpret the Plan and resolve any ambiguities with respect to any of the terms and provisions thereof as written and as applied to the operation of the Plan;

(4) to decide all questions of eligibility and determine the amount, manner and time of payment of any benefits hereunder;

(5) to prescribe procedures to be followed by Participants in filing applications for benefits;

(6) to make a determination as to the right of any person to a benefit and to afford any person dissatisfied with such determination the right to a hearing thereon;

(7) to receive from the Employer, the Trustees, the Trust Service Provider and the Authorized Agent, such information as shall be necessary for the proper administration of the Plan;

(8) to prepare and distribute, in such manner as it determines to be appropriate, information explaining the Plan;

(9) to furnish the Employer, upon request, such annual reports with respect to the administration of the Plan as are reasonable and appropriate;

(10) to receive and review reports from the auditor appointed by the Trustees, the City Treasurer and City Auditors, of the financial condition of the Fund;

(11) to have full power, to manage and control, the Plan and Fund and to authorize in writing, all payments from the Fund by written direction of the Authorized Agent, or otherwise;

(12) to sue in any court of competent jurisdiction for the enforcement of any contract, claim or other right, and to defend against or to compromise, settle or otherwise dispose of any claim or suit against the Employer, the Plan, or the City Treasurer, as Treasurer of the Plan; and

(13) to appoint such person or persons as necessary to perform the following:

a. to receive and separately account for, payments, appropriations, apportionments, allocations, payroll deductions, and any other assets, which are for, or consist of contributions or assets under the Plan for the Fund, which are made by the Employer, the Participants, or from any other source;

b. to transfer, remit, pay over and deliver, upon the written direction of the Authorized Agent, as soon as practicable after his receipt thereof, all such contributions and assets, to the Oklahoma Municipal Retirement Fund for management and investment;

c. to keep as evidence and permanent records, all such written directions of the Authorized Agent for such transfers and disbursements, maintain accurate accounts and records of such receipts, transfers and disbursements, and keep such other records and furnish such information and advice to the Employer, the City Council, the Committee and the Authorized Agent as may be necessary and proper for the performance of such duties in coordinating the administration and operation of the Plan;

d. maintain such records including vital statistics on health, age, sex, birth, death, Compensation and length of Service of all the Participants of the Employer or their beneficiaries who are included in the Plan or who are, or may become eligible for such inclusion, as are necessary for the proper administration of the Plan, and furnish such information as is requested by the Authorized Agent, or is requested by the Administrator;

e. notify the Authorized Agent when any Participant is eligible for Retirement under the Plan; and

f. attend meetings of the Committee while matters pertaining to the Plan, the Employees or their beneficiaries are under consideration.

The Committee shall have no power to waive or fail to apply any requirements of eligibility for a Benefit under the Plan. The Committee may adopt such rules, regulations and actuarial tables as it deems necessary or desirable to administer the Plan. All such rules,

regulations and decisions shall be uniformly and consistently applied to all Employees in similar circumstances.

Any such rule or decision which is not inconsistent with the provisions of the Plan shall be conclusive and binding upon all persons affected by it and there shall be no appeal from any ruling by the Committee which is within its authority.

When making a determination or calculation, the Committee shall be entitled to rely upon information furnished by the Trustees, the Trust Service Provider, the Employer, the Authorized Agent, the legal counsel of the Employer, or the actuary for the Plan.

(b) Authorized Agent: An Authorized Agent shall be designated in writing by the Committee and shall act as the agent of the Employer (but not the agent of the Trustees or the Trust Service Provider of the Oklahoma Municipal Retirement Fund) in matters pertaining to the Plan, the Fund and the Oklahoma Municipal Retirement Fund, to centralize in one person the local administration and coordination thereof, and to file payroll and contribution information, to file claims, forms and applications for Participants, and to advise Participants, the Employer and the Committee. The Authorized Agent, under the control and direction of the Committee, shall have such general duties as the Employer and the Committee may deem necessary and proper for such purposes, which duties shall include but not be limited to, the following:

(1) to coordinate the deduction of Participant contributions and to see that Employer and Participant contributions are properly received and forwarded promptly to the Oklahoma Municipal Retirement Fund for management and investment;

(2) to forward any communications directed to Participants and beneficiaries by the Trustees, the Trust Service Provider or the Oklahoma Municipal Retirement Fund;

(3) to lend assistance to Participants and beneficiaries in filing applications for benefits, and in communicating with the Employer, the Committee and the Trustees or the Trust Service Provider of the Oklahoma Municipal Retirement Fund and to forward such communications to the addressees;

(4) to assist the Committee in determining whether or not Employees are eligible for participation in the Plan;

(5) to certify at the direction of the Committee that a Participant is on an authorized leave of absence, paid or unpaid; and

(6) to file at the direction of the Committee a petition or nomination, and cast a ballot for election of Trustees of the Oklahoma Municipal Retirement Fund.

(c) Plan Counselor: The Committee of the Employer shall appoint the legal advisor of the Employer and the Committee, and such legal advisor shall represent them in any legal matters, proceedings, or litigation.

10.2 **Bonds:** No bond to secure the performance of administrative duties in the operation of the Plan and Fund, shall be required of any persons or organizations unless required by law, or unless required by the Trust Indenture establishing The Oklahoma Municipal Retirement Fund, or unless required by the Employer for any persons or organizations engaged in the

administration of the Plan. If such a bond is required by law, the Trustees or the Employer, the premiums therefor shall be paid as expenses of the Oklahoma Municipal Retirement Fund as to its members, agents, employees, Municipal Retirement Fund, or as expenses of the Employer as to the administration of the Plan. Any agents, officials or Employees of the Employer engaged in the administration of the Plan shall be covered as to the performance of such administrative duties, by any official or other bond covering their regular duties otherwise.

10.3 **Benefit Payments:** All benefits are to be paid pursuant to the provisions of the Plan out of the applicable portion of the Oklahoma Municipal Retirement Fund.

10.4 **Abandonment of Benefits:**

(a) If, anytime following the date either of a Participant or Beneficiary of a deceased Participant becomes entitled to receive any non-deferred benefits under the Plan, then, if the whereabouts of such Participant or Beneficiary is unknown, the benefits may be forfeited in certain limited circumstances as provided hereafter. If the Committee has mailed to the Participant or Beneficiary notice of the present right to receive benefits, and the Committee mails such notice again after one year, then, if no claim has been received by the second anniversary of the first mailing of the notice, the Accounts representing unclaimed Benefits (including those holding Employee contributions) can be forfeited pursuant to Section 5.4 herein.

(b) Each Participant and Beneficiary shall file with the Committee, from time to time in writing, their post office address and each change of post office address, if any, and the Committee shall not be obliged to search for or ascertain the whereabouts of any Participant or Beneficiary. Any communication addressed to a Participant or Beneficiary at their last post office address filed with the Committee, or if no such address was filed, then at their last post office address as shown on the Employer's records, shall be binding on the Participant and the Beneficiary for all purposes of the Plan and Trust.

(c) In the event that the whereabouts of a lost Participant, or lost Beneficiary of a deceased Participant, ever becomes known to the Committee, and either of such parties makes a claim for benefits, the Committee shall, if the Plan is in existence, reinstate any Benefits which have been previously forfeited to satisfy such claim; provided, the amount reinstated shall, in any event, be equal to the amount of the forfeited benefit unadjusted by any increases or decreases under Section 5.6 herein occurring after such forfeitures were allocated. Reinstated Forfeitures shall be satisfied from the following sources in the priority indicated: (i) unallocated Forfeitures, (ii) unallocated Fund increases, or (iii) Employer contributions which the Employer shall make if necessary to satisfy such reinstatement. For purposes of this Subsection (c), the limitations under Section 415 of the Code shall not apply.

10.5 **Benefits Payable to Incompetents:** Any payments due hereunder to a minor or other person under legal disability may be made, at the discretion of the Committee, to a valid power of attorney, a court appointed guardian, or any other person authorized under state law to receive the benefit. The Committee shall not be required to see to the application of any such payment, and the payee's receipt shall be a full and final discharge of all responsibility hereunder of the Employer, the Committee and the Trustees.

ARTICLE XI.
General

11.1 **USERRA:** Notwithstanding any provision of this Plan to the contrary, effective December 12, 1994, contributions, benefits and service credit with respect to qualified military service will be provided in accordance with Section 414(u) of the Code. A Participant returning from military service shall not be entitled to catch-up on Pick-Up Contributions missed during such military service.

11.2 **Not Contract Between Employer and Participant:** Neither the creation of this Plan, nor any amendment to it, nor the creation of any fund, nor the payment of benefits hereunder shall be construed as giving any legal or equitable right to any Participant against the Employer or against the Oklahoma Municipal Retirement Fund, except as provided herein, and all liabilities under this Plan shall be satisfied, if at all, only out of the Fund held by the Oklahoma Municipal Retirement Fund. Participation in the Plan shall not give any Participant any right to be retained in the employ of the Employer, and the Employer hereby expressly retains the right to hire and discharge any Participant at any time with or without cause, as if this Plan had not been adopted, and any such discharged Participant shall have only such rights or interests in the Fund as may be specified herein.

11.3 **Payment of Fees:** The Employer shall pay a fee in an amount determined and revised from time to time by the Oklahoma Municipal Retirement Fund.

11.4 **Governing Law:** The validity, construction and administration of this Plan shall be determined under the laws of the State of Oklahoma.

11.5 **Counterpart Execution:** This Plan may be executed in two or more counterparts, as may be all amendments thereto be executed, and any one of the executed copies shall be deemed an original.

11.6 **Severability:** Every provision of this Agreement is intended to be severable. If any term or provision hereof is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of this Plan.

11.7 **Spendthrift Provisions:** Benefits payable under this Plan shall not be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, charge, garnishment, execution or levy of any kind, either voluntary or involuntary, including any such liability which is for alimony or other payments for the support of a spouse or former spouse, or for any other support of a spouse or former spouse, or for any other relative of the Employee, prior to actually being received by the person entitled to the benefit under the terms of the Plan; and any attempt to anticipate, alienate, sell, transfer, assign, pledge, encumber, charge or otherwise dispose of any right to benefits payable hereunder, shall be void. The Fund shall not in any manner be liable for, or subject to, the debts, contracts, liabilities, engagements or torts of any person entitled to benefits hereunder. The preceding provisions shall not apply to the creation, assignment or recognition of a right to any benefit payable with respect to a Participant pursuant to a domestic relations order, and does not preclude the Oklahoma Municipal

Retirement Fund from complying with a court order requiring deduction from the benefits of a Participant in pay status for alimony and support payments.

11.8 **Maximum Duration:** Nothing herein shall be construed to suspend the power of alienation or prevent the vesting of the interest of any person in the Plan for a longer period than the duration of the lives of the designated Beneficiaries of a particular interest therein in being at the time such designation becomes irrevocable, plus twenty-one (21) years; if any provisions shall be held to violate a rule or law against restraints on alienation or remote vesting, the Plan shall not be vitiated thereby, but the Plan, or the portion of the Plan thus affected, shall immediately be distributed to those entitled as their interest shall then appear.

11.9 **Number and Gender:** Pronouns and other similar words used herein in the masculine gender shall be read as the feminine gender where appropriate; pronouns and other similar words used herein in the neuter gender shall be read as the masculine or feminine gender where appropriate; and the singular form of words shall be read as the plural where appropriate.

11.10 **Compensation and Expenses of Administration:** If a Trustee, a member of Oklahoma Municipal Retirement Fund, or a member of the Committee is an Employee of the Employer, he shall serve without any additional compensation. The Employer may pay all or part of the expenses of administration of the Plan, including the compensation and expenses of the Trustee, and any other expenses incurred at the direction of the Oklahoma Municipal Retirement Fund, including, without limitation, fees of actuaries, accountants, attorneys, investment managers, investment advisors and other specialists, and any other costs of administering the Plan. To the extent that any of such expenses are not paid by the Employer, such expenses shall be paid by the Oklahoma Municipal Retirement Fund out of the Fund. In addition, the Plan or Trustees shall be authorized to charge to a Participant's Account any direct expenses it incurs in connection with such Account, which shall include by example, and not by limitation, expenses resulting from a Participant's QDRO, bankruptcy or default on a Plan loan, and expenses incurred in attempting to locate a Participant. Trustees shall have the power under this Section in their sole discretion to determine the items and amounts thereof which should equitably and reasonably be charged to a particular Account. If such charges exceed the balance in a Participant's Accounts, the excess shall be charged to the general Trust Fund.

11.11 **Supercession of Inconsistent Provisions:** The provisions of the Plan override any conflicting provision contained in the Trust or custodial account documents used with the Plan.

11.12 **Mistake of Fact:** All contributions to the Plan are made subject to the correctness of the amount. In the event a contribution is made to the Plan and Trust by the Employer under a mistake of fact concerning the correctness of such contribution, then the Oklahoma Municipal Retirement Fund shall return such portion of such contribution which is in excess of the amount that would have been contributed had there not occurred a mistake of fact within one year after the payment of the contribution to the Oklahoma Municipal Retirement Fund.

In the case of amounts returned pursuant to this Section 11.12, no earnings attributable to such amounts may be returned to the Employer, but losses attributable thereto shall reduce the amount returned, and no such return shall reduce the balance of any Participant's Municipality

Contribution Accounts to less than the balance which would have been credited thereto had such amount not been contributed.

11.13 **Written Notices:** Any reference herein to written notices or documents or notices or elections in writing shall be deemed to include any method of communication acceptable to the Oklahoma Municipal Retirement Fund, and subject to applicable requirements of Treas. Reg. Section 1.401(a)-21.

IN WITNESS WHEREOF, and as conclusive evidence of the adoption of the foregoing instrument comprising the Plan, the Oklahoma Municipal Retirement Fund, has caused its corporate seal to be affixed hereto and these presents to be duly executed in its name and behalf by its proper officers thereunto authorized this 17th day of December, 2021.

OKLAHOMA MUNICIPAL RETIREMENT FUND

By _____

ATTEST:

By _____
Secretary

STATE OF OKLAHOMA)
) ss.
COUNTY OF OKLAHOMA)

BEFORE ME, the undersigned a Notary Public in and for said County and State, on this 17 day of December, 2021, personally appeared Donna Doden, to me known to be the identical person who subscribed the name of the Oklahoma Municipal Retirement Fund, a municipal corporation, to the foregoing instrument as its Chairperson and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, the day and year last above written.

_____
Notary Public

My Commission Expires:
09/27/2025

My Commission No.: 21012746

(NOTARY SEAL)

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE EMPLOYEE RETIREMENT SYSTEM, DEFINED CONTRIBUTION PLAN FOR THE POSITION OF DEPARTMENT HEAD OR CITY MANAGER FOR THE CITY OF SHAWNEE, OKLAHOMA BY ADOPTING A REVISED AND RESTATED RETIREMENT PLAN; PROVIDING RETIREMENT BENEFITS FOR ELIGIBLE EMPLOYEES OF THE CITY OF SHAWNEE, OKLAHOMA; PROVIDING FOR PURPOSE AND ORGANIZATION; PROVIDING FOR DEFINITIONS; PROVIDING FOR ELIGIBILITY AND PARTICIPATION; PROVIDING FOR NON-ALIENATION OF BENEFITS; PROVIDING FOR EMPLOYER AND EMPLOYEE CONTRIBUTIONS; PROVIDING FOR ACCOUNTING, ALLOCATION, AND VALUATION; PROVIDING BENEFITS; PROVIDING FOR REQUIRED NOTICE; PROVIDING FOR AMENDMENTS AND TERMINATION; PROVIDING FOR TRANSFER TO AND FROM OTHER PLANS; CREATING A RETIREMENT COMMITTEE AND PROVIDING FOR POWERS, DUTIES, AND RIGHTS OF RETIREMENT COMMITTEE; PROVIDING FOR PAYMENT OF CERTAIN OBLIGATIONS; PROVIDING FOR DURATION AND PAYMENT OF EXPENSES; PROVIDING FOR EFFECTIVE DATE; PROVIDING FOR VESTING SCHEDULES; PROVIDING FOR A FUND TO FINANCE THE SYSTEM TO BE POOLED WITH OTHER INCORPORATED CITIES TOWNS AND THEIR AGENCIES AND INSTRUMENTALITIES FOR PURPOSES OF ADMINISTRATION, MANAGEMENT, AND INVESTMENTS PART OF THE OKLAHOMA MUNICIPAL RETIREMENT FUND; PROVIDING FOR PAYMENT OF ALL CONTRIBUTIONS UNDER THE SYSTEM TO THE OKLAHOMA MUNICIPAL RETIREMENT FUND FOR MANAGEMENT AND INVESTMENT; PROVIDING FOR REPEALER AND SEVERABILITY; ADOPTING THOSE AMENDMENTS MANDATED BY THE INTERNAL REVENUE CODE; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COMMISSION OF SHAWNEE, OKLAHOMA:

Section 1. That pursuant to the authority conferred by the laws of the State of Oklahoma, and for the purpose of encouraging continuity and meritorious service on the part of City employees and thereby promote public efficiency, there is hereby authorized created, established, and approved and adopted, effective as of **April 1, 2022,** the amended and restated Plan designated "Employee Retirement System of the City of Shawnee**,** Oklahoma, Defined Contribution Plan," (hereinafter called System), an executed counterpart of which is marked Exhibit "A" (Joinder Agreement) and Exhibit "B" (amended and restated plan) and attached hereto as part hereof.

Section 2. FUND. A fund is hereby provided for the exclusive use and benefit of the persons entitled to benefits under the System. All contributions to such fund shall be paid over to and received in trust for such purpose by the City. Such Fund shall be pooled for purposes of management and investment with similar funds of other incorporated cities, towns, and municipal trusts in the State of Oklahoma as a part of the Oklahoma Municipal Retirement Fund in accordance with the trust agreement of the Oklahoma Municipal Retirement Fund, a public trust. The City shall hold such contributions in the form received, and from time to time pay over and transfer the same to the Oklahoma Municipal Retirement Fund**,** as duly authorized and directed by the Board of Trustees. The Fund shall be nonfiscal and shall not be considered in computing any levy when the annual estimate is made to the County Excise Board.

Section 3. APPROPRIATIONS. The City of Shawnee, Oklahoma, is hereby authorized to incur the necessary expenses for the establishment, operation, and administration of the System, and to appropriate and pay the same. In addition, the City of Shawnee, Oklahoma**,** is hereby authorized to appropriate annually such amounts as are required in addition to employee contributions to maintain the System and the Fund in accordance with the provisions of the Defined Contribution Plan. Any appropriation so made to maintain the System and Fund shall be for deferred wages or salaries, and for the payment of necessary expenses of operation and administration to be transferred to the trustees of the Oklahoma Municipal Retirement Fund for such purposes and shall be paid into the Fund when available, to be duly transferred to the Oklahoma Municipal Retirement Fund.

Section 4. EXECUTION. The Mayor and City Clerk be and they are each hereby authorized and directed to execute (in counterparts, each of which shall constitute an original) the System instrument, and to do all other acts and things necessary, advisable, and proper to put said System and related trust into full force and effect, and to make such changes therein as may be necessary to qualify the same under Sections 401(a) and 501(a) of the Internal Revenue Code of the United States. The counterpart attached hereto as Exhibit "A" and Exhibit "B", which has been duly executed as aforesaid simultaneously with the passage of this Ordinance and made a part hereof, is hereby ratified and confirmed in all respects.

This Committee is hereby authorized and directed to proceed immediately on behalf of the City of Shawnee, Oklahoma, to pool and combine the Fund into the Oklahoma Municipal Retirement Fund as a part thereof, with similar funds of such other cities and towns, for purposes of pooled management and investment.

Section 5. REPEALER. Any Ordinance inconsistent with the terms and provisions of this Ordinance is hereby repealed, provided, however, that such repeal shall be only to the extent of such inconsistency and in all other respects this Ordinance shall be cumulative of other ordinances regulating and governing the subject matter covered by this Ordinance.

Section 6. SEVERABILITY. If, regardless of cause, any section, subsection, paragraph, sentence, or clause of this Ordinance, including the System as set forth in Exhibit "A" and Exhibit "B"**,** is held invalid or to be unconstitutional, the remaining sections, subsections, paragraphs, sentences, or clauses shall continue in full force and effect and shall be construed thereafter as being the entire provisions of this Ordinance.

Section 7. EMERGENCY. Whereas, in the judgment of the City Commission of the City of Shawnee, Oklahoma, the public peace, health, safety, and welfare of the City of Shawnee, Oklahoma, and the inhabitants thereof demand the immediate passage of this Ordinance, an emergency is hereby declared, the rules are suspended, and this Ordinance shall be in full force and effective on its passage, approvals and publication.

*****END*****

The undersigned hereby certifies that the foregoing Ordinance was introduced before the City Commission of the City of Shawnee on the _____ day of _____, 20_____, and was duly adopted and approved by the Mayor and City Commission, on the _____ day of _____, 20_____, after compliance with notice requirements of the Open Meeting Law (25 OSA, Sections 301, et. seq.).

PASSED AND APPROVED this ___ day of _____, 2022.

_____
(SEAL) ED BOLT, MAYOR
ATTEST:

_____
LISA LASYONE, CMC, CITY CLERK

PASSED AND APPROVED and the emergency clause voted on separately this ___ day of _____**,** 2022.

_____
(SEAL) ED BOLT, MAYOR
ATTEST:

_____
LISA LASYONE, CMC, CITY CLERK

Approved as to form and legality this _____ day of _____, 2022

_____
JOSEPH M. VORNDRAN
CITY ATTORNEY

OKLAHOMA MUNICIPAL RETIREMENT FUND
MASTER DEFINED CONTRIBUTION PLAN
JOINDER AGREEMENT

City of Shawnee [a municipality or authority chartered, incorporated or formed under the laws of Oklahoma], a city, town, agency, instrumentality, or public trust located in the State of Oklahoma, with its principal office at Shawnee, Oklahoma, hereby establishes a Defined Contribution Plan to be known as **City of Shawnee Special Incentive CMO Plan** (the "Plan") in the form of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan.

Except as otherwise provided herein, the definitions in Article II of the Plan apply.

1. **Dates.**
   - [ ] This instrument is a new Plan effective __ ("Effective Date") [such date may not be earlier than the first day of the Plan Year in which it is executed].
   - [X] This instrument is an amendment, restatement, and continuation of the Previous Plan, which was originally effective July 1, 2013. The effective date of this Joinder Agreement is **April 1, 2022** ("Effective Date") [date may not be prior to Plan Year of the date of execution], except as otherwise stated in the Plan and the Joinder Agreement.
2. **Employee.**

   The word "Employee" shall mean:
   - [ ] Any person, other than a Leased Employee, who, on or after the Effective Date, is considered to be a regular full-time employee in accordance with the Employer's standard personnel policies and practices, and is receiving remuneration for such services rendered to the Employer (including any elected official and any appointed officer or employee of any department of the Employer, whether governmental or proprietary in nature), including persons on Authorized Leave of Absence. Employees shall not include independent contractors. Elected members of the City Council shall not be considered to be Employees solely by reason of their holding such office.
   - [ ] Any person, other than a Leased Employee, who, on or after the Effective Date, is considered to be a regular employee in accordance with the Employer's standard personnel policies and practices (including part-time, seasonal and temporary employees), and is receiving remuneration for such services rendered to the Employer (including any elected official and any appointed officer or employee of any department of the Employer, whether governmental or proprietary in nature), including persons on Authorized Leave of Absence. Employees shall not include independent contractors. Elected members of the City Council shall not be considered to be Employees solely by reason of their holding such office.
   - [X] Any person who, [X] on or after the Effective Date, [ ] as of , holds the position of:
     - [X] City Manager, City or Town Administrator, President, Chief Executive Officer, General Manager, or District Manager, as applicable.
     - [ ] Assistant City Manager [ ] Chief of Police [ ] Fire Chief
     - [X] Department Head or Department Manager [ ] Finance Director or Chief Financial Officer
     - [ ] General Counsel or Municipal Attorney [ ] Municipal Judge
     - [ ] _ (specify position)

   The word "Employee" shall not include:
   - [X] Any person who is currently accruing benefits under any other state retirement system.
   - [X] Any person in the following position and who is covered under another retirement program or system approved by the City:
     - [ ] City Manager, City or Town Administrator, President, Chief Executive Officer, General Manager, or District Manager, as applicable.
     - [ ] Assistant City Manager [X] Chief of Police [X] Fire Chief
     - [ ] Department Head or Department Manager
     - [ ] Finance Director or Chief Financial Officer
     - [ ] General Counsel or Municipal Attorney [ ] Municipal Judge
     - [ ] __ (specify position)
   - [ ] Any person who _ [description may include a position but not the name of an individual].

3. **Entry Date.**
Eligible Employees shall commence participation in the Plan: (Select only one)

[ ] months (any number of months up to twelve) after the later of the Employee's Employment Commencement Date or the date the definition of Employee in Section 2 hereof was met, provided that the individual has met the definition of Employee in Section 2 hereof throughout such period.

[X] On the Employee's Employment Commencement Date. (If the Employer has opted out of Old Age and Disability Insurance (OADI), this option must be elected).

4. **Definition of Compensation.**
Compensation shall exclude the item(s) listed below:

[ ] No exclusions.
[ ] Overtime pay.
[ ] Bonuses.
[ ] Commissions.
[ ] Longevity pay.
[X] Severance pay.
[ ] Fringe benefits, expense reimbursements, deferred compensation and welfare benefits.
[X] Accrued vacation or sick leave paid upon termination of employment and moving expenses.
[ ] Other: [must be definitely determinable]

5. **Plan Design.**
The Employer hereby elects the following Plan design:

[ ] **Pick-up Option**. Each Employee shall be required to contribute to the Plan % of his or her Compensation. These contributions shall be picked up and assumed by the Employer and paid to the Fund in lieu of contributions by the Participant. No Participant shall have the option of receiving the contributed amounts directly as Compensation.

[ ] **Thrift Plan Option**.

[ ] A Participant may elect to contribute to the Plan for each Valuation Period an amount which is at least 1%, but no more than % of his Compensation ("Mandatory Contributions"). Mandatory Contributions shall be made by payroll deductions. A Participant shall authorize such deductions in writing on forms approved by, and filed with the Committee.

[ ] The Employer shall contribute to the Fund an amount equal to % of the total Mandatory Contributions contributed by Participants.
The Employer contribution shall be allocated in the proportion which the Mandatory Contributions of each such Participant for such Valuation Period bear to the total Mandatory Contributions contributed by all such Participants for such Valuation Period. Forfeitures attributable to Employer contributions under the Thrift Plan Option of this Section 5 shall be used to reduce Employer contributions under such Option.

[X] **Fixed Option**. With respect to each Participant, the Employer will make a $5,000 Employer contribution for each of the five Plan Years during the period beginning July 1, 2013, and ending July 30, 2018, provided that a Participant will be entitled to an Employer Contribution for a Plan Year only if he or she was employed by the Employer on the last day of the applicable Plan Year in the same or higher position as he or she had on the Effective Date. Such Employer contributions for each Plan Year shall be made on or after the last day of the applicable Plan Year.

[X] **Variable Option**.

[X] The Employer may make a contribution to the Plan for the benefit of the Participants for each Valuation Period. The contribution may be varied from year to year by the Employer. (Select one option below)

[ ] Option A: The Employer contribution shall be allocated in the proportion that each such Participant's total points awarded bear to the total points awarded to all Participants with respect to such year. A Participant shall be awarded one point for each Year of Service.

[X] Option B: The Employer contribution shall be allocated in the proportion which the Compensation of each such Participant for such Valuation Period bears to the Compensation paid to all such Participants for such Valuation Period.

[ ] Option C: A combination of Options A and B in the following ratios: % for Option A, and % for Option B.

[ ] **401(k) Option**.
(This Option available only if elected prior to May 1, 1986)

[ ] Participant Deferral Elections shall be allowed under the provisions of Section 4.8 of the Plan. Participants shall be allowed to defer no more than % of their Compensation for each election period.

[ ] Section 4.8(d) of the Plan ("Roth Elective Deferrals") shall apply to contributions after (enter a date later than January 1, 2006, but not earlier than the date the Roth option was initially adopted), and the Plan will accept a direct rollover from another Roth elective deferral account under an applicable retirement plan as described in Code Section 402A(e)(1).

[ ] **Matching Contribution Option**. The Employer shall contribute to the Fund an amount equal to % of the Participant's contributions under the Employer's Section 457(b) Deferred Compensation Plan. The Employer matching contribution shall be limited to % of the Participant's Compensation. Forfeitures attributable to Employer matching contributions under this Matching Contribution Option of Section 5 shall be used to reduce Employer matching contributions under such Option.

[ ] **No Employer Contribution Option**.

6. **Other Participant Contribution Options.**
   [ ] Voluntary Nondeductible Contributions by Participants shall be allowed under the provisions of Section 4.4 of the Plan.
   [ ] A Participant may not withdraw Voluntary Nondeductible Contributions.
   [X] Participants shall not contribute to the Plan.

7. **Self-Directed Investments.**
   [X] Are permitted.
   [ ] Are not permitted.

8. **Allocation of Forfeitures Available.**
   Forfeitures of Employer contributions attributable to the Fixed Option or Variable Option under Section 5 hereof:
   [ ] Shall be added to Employer contribution under such Option for the calendar quarter following the Participant's Break in Service.
   [X] Shall reduce the Employer contribution under such Option for the current or next following Plan Year.

9. **Service for Worker's Compensation Period.**
   If a Participant is on an Authorized Leave of Absence and is receiving worker's compensation during such Authorized Leave of Absence, such Participant
   [X] shall be credited with Service for such period for purposes of vesting only and not for purposes of allocations of Employer Contributions.
   [ ] shall not be credited with Service for such period.

10. Vesting.

For purposes of vesting under Section 6.4 of the Plan, the Employer hereby elects the following Option:

[ ] Option A

Years of Service	Vested Percentage	Forfeited Percentage
less than 1	0%	100%
at least 1 but less than 2	10%	90%
at least 2 but less than 3	20%	80%
at least 3 but less than 4	30%	70%
at least 4 but less than 5	40%	60%
at least 5 but less than 6	50%	50%
at least 6 but less than 7	60%	40%
at least 7 but less than 8	70%	30%
at least 8 but less than 9	80%	20%
at least 9 but less than 10	90%	10%
10 or more	100%	0%

[ ] Option B

Years of Service	Vested Percentage	Forfeited Percentage
Less than 3	0%	100%
at least 3 but less than 4	20%	80%
at least 4 but less than 5	40%	60%
at least 5 but less than 6	60%	40%
at least 6 but less than 7	80%	20%
7 or more	100%	0%

[ ] Option C

Years of Service	Vested Percentage	Forfeited Percentage
less than 5	0%	100%
at least 5 but less than 6	50%	50%
at least 6 but less than 7	60%	40%
at least 7 but less than 8	70%	30%
at least 8 but less than 9	80%	20%
10 or more	100%	0%

[ ] Option D

Years of Service	Vested Percentage	Forfeited Percentage
Immediate 100% Vesting	100%	0%

[X] Option E

The Schedule indicated below (the sum of the Vested Percentage and Forfeited Percentage at each Year of Service must equal 100%) the vesting schedule must be at least as favorable as one of the safe harbor pre-ERISA schedules. The safe harbor vesting schedules are:

a. 15-year cliff vesting schedule: The plan provides that a participant is fully vested after 15 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service).

b. 20-year graded vesting schedule: The plan provides that a participant is fully vested based on a graded vesting schedule of 5 to 20 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service).

c. 20-year cliff vesting schedule for qualified public safety employees: The plan provides that a participant is fully vested after 20 years of creditable service (service can be based on years of employment, years of participation, or other creditable years of service). This safe harbor would be available only with respect to the vesting schedule applicable to a group in which substantially all of the participants are qualified public safety employees (within the meaning of Section 72(t)(10)(B)).

Years of Service*	**Vested Percentage**	**Forfeited Percentage**
less than 1	**0%**	**100%**
at least 1 but less than 2	**0%**	**100%**
at least 2 but less than 3	**0%**	**100%**
at least 3 but less than 4	**0%**	**100%**
at least 4 but less than 5	**0%**	**100%**
5 or more	**100%**	**0%**

*Provided however not withstanding anything to the contrary in this Joinder or the Master Defined Contribution Plan, years of service for this vesting schedule shall not include service prior to July 1, 2013. If a Participant who has reached age 65 and/or meets Normal Retirement Age in the Employer's Defined Benefit Plan will be immediately vested in Employer Fixed Contribution.

[ ] **Option F**
To comply with the Internal Revenue Service Regulations promulgated pursuant to the Code Section 3121(b)(7)(F), Participants who are part-time, seasonal or temporary Employees will have immediate vesting.
(If this Option F is elected, one of the other Options above must also be elected for Participants who are not part-time, seasonal or temporary Employees).

11. Participant Loans.
[ ] Participant loans shall be offered pursuant to Section 6.14 of the Plan.
[X] Participant loans shall not be offered.

12. Direct Transfer to Other Retirement Plan.
[X] Direct transfer of a Participant's accounts to another defined contribution plan sponsored by the Employer is not permitted.
[ ] The Accounts of any Participant who (i) is 100% vested in his Accounts in this Plan; (ii) has ceased to be eligible for participation in this Plan; and (iii) who becomes eligible for participation in another defined contribution retirement plan sponsored by the Employer (the "Other Retirement Plan"), shall be directly transferred to the Other Retirement Plan as soon as practicable after the Plan Administrator provides written direction to the Trustee to such effect in a form acceptable to the Trustee.

13. Valuation Date. Except with respect to any Special Valuation Date determined in accordance with Section 5.10, the Valuation Date for the Plan shall be on each business day of the Plan Year for which Plan assets are valued on an established market.

14. Determination of Vesting for City Manager. Any Participant in the position of City Manager for the City of Shawnee as of November 1, 2014, shall receive 100% immediate vesting in the Plan.

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15. The Employer has consulted with and been advised by its attorney concerning the meaning of the provisions of the Plan and the effect of entry into the Plan.

IN WITNESS WHEREOF the City of Shawnee has caused its corporate seal to be affixed hereto and this instrument to be duly executed in its name and behalf by its duly authorized officers this _____ day of _____, _____.

City of Shawnee

By:_____

Attest: Title:_____

_____

Title:_____

(SEAL)

The foregoing Joinder Agreement is hereby approved by the Oklahoma Municipal Retirement Fund this _____ day of _____, _____.

OKLAHOMA MUNICIPAL RETIREMENT FUND

By:_____

Title:_____

Attest:

_____
Secretary

(SEAL)

Required Disclosures. This Joinder Agreement is to be used only with the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan. Failure to properly complete this Joinder Agreement may result in failure of the Plan to qualify under Code Section 401(a). In accordance with IRS Rev. Proc. 2017-41, the Provider (as defined in Rev. Proc. 2017-41) who has obtained Internal Revenue Service approval of the Oklahoma Municipal Retirement Fund Master Defined Contribution Plan has authority under the Plan document to amend the Plan on behalf of adopting employers for certain changes in the Code, regulations, revenue rulings, other statements published by the Internal Revenue Service, including model, sample or other required good faith amendments. The Provider will inform adopting employers of any such amendments or of the discontinuance or abandonment of the Pre-Approved Plan document. The name, address and telephone number of the Provider is: McAfee & Taft A Professional Corporation, 211 N. Robinson, Oklahoma City, OK 73102, telephone (405) 552-2231. Any inquiries by the adopting employer regarding the adoption of the Plan, the meaning of Plan provisions, or the effect of the Internal Revenue Service advisory letter on the Pre-Approved Plan may be directed to the Provider.

Reliance on Sponsor Opinion Letter. The Provider has obtained from the IRS an Opinion Letter (as defined in Rev. Proc. 2017-41) specifying the form of this Joinder Agreement and the basic plan document satisfy, as of the date of the Opinion Letter, Code §401. An adopting Employer may rely on the Preapproved Plan Sponsor's IRS Opinion Letter only to the extent provided in Rev. Proc. 2017 41. The Employer may not rely on the Opinion Letter in certain other circumstances or with respect to certain qualification requirements, which are specified in the Opinion Letter and in Rev. Proc. 2017 41 or subsequent guidance. In order to have reliance in such circumstances or with respect to such qualification requirements, the Employer must apply for a determination letter to Employee Plans Determinations of the IRS.

Regular Board of Commissioners **9.**

Meeting Date: 04/04/2022

Resolution

Submitted By: Kacie Eck, City Clerk

Department: City Clerk

Information

Title of Item for Agenda

Consideration of a resolution declaring certain City of Shawnee property surplus and no longer needed for city purposes; describing said items; and authorizing the sale of said items at the City of Shawnee's discretion.

Attachments

Memo

Resolution

City Manager's Office
16 W. 9th St.
Shawnee, OK 74801
ShawneeOK.org

Date: April 4, 2022

To: City Commission

From: Andrea Weckmueller-Behringer, City Manager

Subject: Surplus of Reclaimed Bricks

Background: In 2018/2019 improvements were made to the roadway around the Santa Fe Depot. From that project, approximately 27,000 bricks were salvaged and stored by the Public Works Department.

The bricks are palletized, in fair/good condition, and a consist of "Standard" and "Pittsburgh V.P. & B. Brick Co." brands.

Based on consultation with brick sellers, the estimated value of reclaimed bricks can range from $0.25 (wholesale) to $0.75 (retail) per brick. The potential revenue from the surplus of the bricks is $6,750 to $20,250. The estimated revenue exceeds the $5,000 threshold established in Ordinance 2702 NS, thereby requiring a resolution by the City Commission which declares the bricks to be surplus property.

Financial Impact: Potential revenue of $6,750 to $20,250 to be deposited in the Street Improvement Fund, Fund 302, as Miscellaneous Revenue.

Attachment: Resolution.

Staff Recommendation: Approval of the item.

RESOLUTION NO. _____

A RESOLUTION DECLARING CERTAIN CITY OF SHAWNEE PROPERTY SURPLUS AND NO LONGER NEEDED FOR CITY PURPOSES; DESCRIBING SAID ITEMS; AND AUTHORIZING THE SALE OR DISPOSAL OF SAID ITEMS AT THE CITY OF SHAWNEE'S DISCRETION.

BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE CITY OF SHAWNEE, OKLAHOMA:

That the items of personal property are described as:

Approximately twenty-seven thousand (27,000) bricks.

Said property is hereby declared as City owned property which is surplus and no longer needed for City purposes; that the City of Shawnee is authorized to sell or dispose of said items at the City of Shawnee's discretion.

PASSED AND APPROVED this 4th day of April, 2022.

_____
ED BOLT, MAYOR

ATTEST:

_____
LISA LASYONE, CMC, CITY CLERK

DRAFT

Regular Board of Commissioners **10. a.**

Meeting Date: 04/04/2022
Bid Award
Submitted By: Kacie Eck, City Clerk
Department: City Clerk

Information

Title of Item for Agenda
Kids Space Park Improvements Project (Award)

Attachments

Memo
Recommendation Letter
Advertisement
Plan Holders List
Bid Specifications
Addendum No. 1
Addendum No. 2
Bid Tabulation

Office of Engineering

222 N. Broadway Ave.
Shawnee, OK 74801
ShawneeOK.org

Date: April 4, 2022

To: City Commission

From: Seth Barkhimer, City Engineer

Subject: Consideration Bids: Kid's Space Park Improvement (Award)

Background:

In 2019 the City of Shawnee entered into a Professional Services Agreement with Planning Design Group (PDG) for final design on the Kid's Space Park Improvement project. With design complete, the project was advertised, and staff opened bids at the March 21, 2022 commission meeting.

Staff, and the PDG design team, have reviewed the bid proposals. Six bids were received with Base Bid ranging from $3,387,382.10 (low) to $4,199,401 (high). The design estimate prior to the bid opening was $3,997,559.00.

Staff recommends awarding the contract to Lambert Construction Company. Lambert was the 2nd lowest bid received with a break down outlined below:

- Base Bid: $3,552,794.69
- Alternate 1a – Demo and Removal of Existing Fencing: $3,176.94
- Alternate 1b – 5' HT Chain Link Fence: $23,643.42
- Alternate 2 – Basketball Sports Lighting: $27,909.00
- Alternate 3 – Pickleball Sports Lighting: $26,938.00
- Alternate 4 – Water Fountains w/ Service line from Meter Location: $11,824.58

Staff is requesting approval to award the base bid, along with alternates 1a, 1b, 2 and 3, for a total contract in the amount of $3,634,462.05.

The low bid from Bruce Johnson Construction was rejected for reasons, including, but not limited to:

- No past project of similar scope and/or size;
- The bonding capacity of the contractor was near the company's maximum allowable and could prevent future change order flexibility for the project team;
- Conflicting item unit cost with design estimate and other bids received;

Financial Impact: The contract is for $3,634,462.05. It will be funded from account - 303-5-0940-54200 – Capital Outlay Buildings and Improvement; Project No. C-21-03C1

Attachment: Bid Tabulation, Notice to Bidders, Plan Holders List, Bid Documents, Project Specifications, Addendum #1, & Addendum #2

Staff Recommendation: Award of the contract.

PDG
PLANNING DESIGN GROUP
Landscape Architecture | Land Planning

March 29, 2022

Mr. Seth Barkhimer, PE, Director of Engineering
City of Shawnee
16 West 9th Street
Shawnee, OK 74801

RE: Kids Space Park Improvements Project – Bid Tabulation

Dear Mr. Barkhimer:

A total of six (6) bids were opened on Monday, March 21, 2022, for the Kids Space Park Improvements Project. Bruce Johnson Construction was the apparent low bidder for the project, when bids were opened.

After reviewing all bids, the City of Shawnee and PDG, chose to request that all Bruce Johnson Construction submit the Contractor's Qualification Statement and provide references. Upon review of the above-mentioned documents, it was evident that the low bidder, Bruce Johnson Construction., was not the most qualified contractor to complete the project based on the contract drawing and specification requirements, their area of expertise of construction not being related to this project, and their limited bonding capacity. PDG supports the City of Shawnee's recommendation to reject Bruce Johnson Construction, Inc., based on the items mentioned above, particularly concerns due to lack of experience with park related projects, as well as concerns related to their bonding capacity submitted to the City of Shawnee.

Based on the attached bid tabulation sheet, Planning Design Group recommends Lambert Construction be awarded the construction contract, assuming they met all other City requirements, consisting of the Base Bid and Add Alternates 1a, 1b, 2, and 3, for a total of $3,634,462.05.

Planning Design Group is familiar with Lambert Construction, and the sub-contractors preliminarily listed in their Statement of Qualifications. Based on this information, we are comfortable that they can meet all requirements of the project.

If I can answer any questions, please don't hesitate to contact me.

Sincerely,

Geoffery Evans, PLA, ASLA
Project Manager
PLANNING DESIGN GROUP, Inc.

Attachment: Kids Space Park Improvements Project Bid Tabulation – Corrected

ADVERTISEMENT FOR BIDS

Kids Space Park Improvements Project

FOR

CITY OF SHAWNEE, OKLAHOMA

Separate sealed bids for the **Kids Space Park Improvements Project,** for the City of Shawnee, Oklahoma will be received by the City of Shawnee, Oklahoma at City Hall, 16 West 9th Street, Shawnee, Oklahoma 74801, until 4**:00 P.M., March 21, 2022** for furnishing tools, materials and labor, and performing the work necessary to be done in the construction of the above.

All bids that have been duly received will be publicly opened and read aloud by the designated representative, in the Commission Chambers of the City of Shawnee, Oklahoma, at the time and date shown above.

The information for Bidders, Bid Forms, Contract, Plans, Specifications, Bond Forms and other Contract Documents (and addenda, if any) may be examined at the following locations:

1. City of Shawnee, Oklahoma, 16 West 9th Street, Shawnee, Oklahoma 74801
2. Bid News/iSqFt
3. Southwest Construction News
4. ePlan

Plans and Specifications for this project may be obtained from Planning Design Group through a digital download file. Download will contain PDF files of the plans and specifications.

Pre-Bid Conference: A **"MANDATORY"** Pre-Bid Conference will be held, March 10, 2022, at 10:00am, at the Shawnee Commission Chambers, 16 West 9th Street, Shawnee, Oklahoma 74801 which is a prequalification.

The Owner reserves the right to waive any informality or to reject any or all bids.

The sealed proposal of each bidder shall be accompanied by a Noncollusion Affidavit, Business Relationship Affidavit, Experience and Equipment Questionnaire and a Certified or Cashier's Check or Bidder's Surety Bond in the sum of five percent (5%) of the amount of the bid will be required from each bidder to be retained as liquidated damages in the event the successful bidder fails, neglects, or refuses to enter into said contract for the construction of said public improvements for said project, and furnish the necessary bonds within ten (10) days from and after the date the award is made.

Bids received more than ninety-six hours, excluding Saturdays, Sundays and holidays, before the time set for opening of bids, as well as bids received after the time set for opening of bids, will not be considered and will be returned unopened.

No bidder may withdraw his bid within sixty (60) days after the actual date of the opening.

February 21, 2022
Date

Andrea Weckmueller-Behringer, City Manager

Plan Holder's List			
CITY OF SHAWNEE - KID'S SPACE PARK IMPROVEMENTS			
	Company	Address	Contact Information
	SW Construction News	5031 South 33rd West Avenue, Suite #210 Tulsa, OK 74107 *918-493-5066*	Thressie Terrell thressie@swcnews.com
	(iSQft)	Construct Connect 30 Technology Parkway South Ste 100 Norcross, GA 30092	Nikki Diggs nikki.diggs@cmdgroup.com
	ePlan	1400 Forum Blvd. Suite 7B Columbia, MO 65203 Phone: (573)447-7130	Sharon Picard eplanadmin@eplanbidding.com
1	Downey Contracting, LLC	405-478-5277	Day Zimbelman dzimbelman@downeycontracting.com
2	Bruce Johnson Construction	405-922-5000	Bruce Johnson brucejohnsonconst@att.net
3	Lambert Construction	405-372-1444	Stephen Mitchell stephen@lambertconstructionco.com
4	Wynn Construction	405-753-1120	Derek Robbins bid@wynnconstruction.com
5	Rudy Construction	405-481-3117	Jacob Schooler jschooler@rudyconstruction.com
6	PTI Sports and Recreation	806-570-9829	Phil Guerra phil@ptiexperts.com
7	C4L	405-314-0802	Mike Young kirk@c4lokc.com
8	Shiloh Enterprises	405-341-5500	Steve Preston estimating@shiloh-inc.com
9	RJR Enterprises	479-936-1092	Ryan Brown ryanbrown@nwarrjr.com
10	Foreverlawn	214-405-3096	Ross Spencer ross@tulsa.foreverlawn.com
11	Play By Design	918-809-2293	Cheryl Sumners cheryl@playbydesigninc.com
12	Oakley Fence Co.	405-372-6542	Doug Stover doug@oakleyfence.com
13	GameTime / CRI	620-440-9831	Justin Long justin@cunninghamrec.com
14	Happy Playgrounds	918-851-9518	Kelli Collins kellicolins@happyplaygrounds.com
15	ACS Playgrounds	405-406-9670	Bryan Montgomery bryanm@acsplay.com

CONTRACT DOCUMENTS
AND
TECHNICAL SPECIFICATIONS

FOR

KIDS SPACE PARK IMPROVEMENTS

CITY OF SHAWNEE
Department of Engineering
Seth Barkhimer, Director

Prepared By

Planning Design Group
5314 South Yale Ave, Suite 510
Tulsa, Oklahoma 74135
918/628-1255

CONTRACT DOCUMENTS
AND
TECHNICAL SPECIFICATIONS

FOR

Kids Space Park Improvements Project

FOR

THE CITY OF SHAWNEE

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TECHNICAL SPECIFICATIONS

ADVERTISEMENT FOR BIDS

Kids Space Park Improvements Project

FOR

CITY OF SHAWNEE, OKLAHOMA

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The Owner reserves the right to waive any informality or to reject any or all bids.

The sealed proposal of each bidder shall be accompanied by a Noncollusion Affidavit, Business Relationship Affidavit, Experience and Equipment Questionnaire and a Certified or Cashier's Check or Bidder's Surety Bond in the sum of five percent (5%) of the amount of the bid will be required from each bidder to be retained as liquidated damages in the event the successful bidder fails, neglects, or refuses to enter into said contract for the construction of said public improvements for said project, and furnish the necessary bonds within ten (10) days from and after the date the award is made.

Bids received more than ninety-six hours, excluding Saturdays, Sundays and holidays, before the time set for opening of bids, as well as bids received after the time set for opening of bids, will not be considered and will be returned unopened.

No bidder may withdraw his bid within sixty (60) days after the actual date of the opening.

February 21, 2022
Date

Andrea Weckmueller-Behringer, City Manager

INSTRUCTIONS TO BIDDERS

1. Receipt and Opening of Bids

The City of Shawnee (herein called the "Owner"), invites bids on the form attached hereto. All blanks must be appropriately filled in. Bids will be received by the Owner at the office of the City Clerk until 4**:00 P.M., March 21, 2022.** The envelopes containing the bids must be sealed, addressed to the City of Shawnee, 16 West 9th Street, Shawnee, Oklahoma, and designated as Bid for the **Kids Space Park Improvements Project** All bids that have been duly received will be publicly opened and read aloud by the City in the City Hall Commission Chambers of the City of Shawnee.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. The awarding of a contract to the lowest responsible bidder or bidders shall be made within sixty (60) days after the opening of bids unless the governing body of the awarding public agency, by formal recorded action and for good cause shown, provides for a reasonable extension of that period, which extension period shall not in any event exceed fifteen (15) days where only state or local funds are involved, or not to exceed ninety (90) days on any award of contract for the construction of a public improvement where funds are utilized which are furnished by an agency of the United States Government.

2. Pre-Bid Conference

A mandatory pre-bid conference for prospective bidders will be held on March 10, 2022, at 10:00 A.M., in the Commission Chambers, City Hall, 16 West 9th Street, Shawnee, Oklahoma 74801. The purpose of this conference is to afford the prospective bidders the opportunity to ask questions relative to the project. The fact that a prospective bidder does not choose to attend will in no way affect his bid and the City of Shawnee (Owner) will in no way be bound by any statement made at this conference.

3. Preparation of Bids

Each bid must be submitted in a sealed, opaque envelope bearing on the outside the name of the bidder, his address and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form.

The following documents shall be submitted in the bid package:

a. Proposal (including acknowledging of any/all addenda)
b. Bid Bond
c. Noncollusion Affidavit 74 92 85.22 (Bid)
d. Nondiscrimination Certificate
e. Anti-kickback Affidavit
f. Business Relationships Affidavit

4. Subcontracts

The bidder is specifically advised that any person, firm or other party to whom it is proposed to award a subcontract under this contract must be acceptable to the Owner.

5. Telegraphic Modification

Shall not be accepted.

6. Method of Bidding

The Owner invites the following bid:

Completed Proposal Form for the Kids Space Park Improvements Project for the City of Shawnee.

7. Qualifications of Bidders

Each Bidder shall be prepared, as requested by the Owner, to present evidence of experience, qualifications and financial ability to execute the terms of the Bid / Contract Documents. In determining the lowest, qualified, and best responsible Bid, the following elements shall be considered:

A. Whether the Contractor(s) maintains a permanent place of business.
B. Whether the Contractor(s) and/or their subcontractor(s) has adequate staffing, manpower and equipment to do the Work promptly and properly.
C. Whether the Contractor(s) has suitable financial ability to meet the obligations incidental to the Work.
D. Whether the Contractor(s) and/or their Subcontractor(s) has appropriate training and technical experience.
E. Whether the Contractor(s) and/or their subcontractor(s) has a past record appropriate to the responsibilities and scope of the project.
F. The Contractor(s) project references.
G. The Contractor(s) bonding capacity and status.
H. The Contractor(s) and/or their subcontractor(s) ability, capacity, and skill to perform the level of service required.
I. Whether the Contractor(s) and/or their subcontractor(s) can perform the scope of work and/or provide the service promptly or within the time specified, without delay or interference, including but not limited to, past experience with the Owner or any duly constituted authority thereof.
J. The character, integrity, reputation, judgment, experience and efficiency of the Contractor(s).
K. The quality of performance of previous contracts or services.
L. The previous and existing compliance by the Contractor(s) and/or their Subcontractor(s) with any laws and ordinances (Federal, State and/or local) relating to the scope of work or level of services required.
M. The quality, suitability, availability, and adaptability of the goods, products, supplies, equipment, or contractual services to the particular use required.
N. The operating cost, maintenance requirements, and performance data of major items of materials and equipment proposed by the Bidder.
O. The ability of the Contractor(s) and/or their subcontractor(s) to provide future maintenance and service for the use of the subject of the Contract.
P. The complexity, number, and scope of conditions of the Contract.
Q. The bidders conformance to the Bid / Contract Documents.
R. The Bidder's warranties, bonds, terms, and conditions.
S. Whether the bid complies with the specifications, drawings, and other requirements herein.

8. Execution of the Contract

A. The Owner reserves the right to accept any bid or portions thereof, or to reject any and all Bids or portions thereof, to waive any and all informalities not involving price, time or changes in the scope of work and to negotiate contract terms with the successful Bidder, and the right to disregard all nonconforming, non-responsive, unbalanced, or conditional Bids. The Owner also reserves the right to reject the Bid of any Bidder if the Owner believes that it would be in their best interest.

B. Upon the request of the Owner, a Bidder(s) whose Bid is under consideration for award of Contract shall submit promptly to the Owner, satisfactory evidence indicating the Bidder's financial resources, construction experience and organization available for the performance of the Contract and the name of any alternate subcontractor(s) proposed for Owner approval.

C. Not withstanding any delay in the preparation and execution of the formal Contract(s), each Bidder shall be prepared, upon written Notice of Award, to commence Work following the Owner's issuance of the Notice to Proceed.

9. Bid Security

Each bid must be accompanied by cash, certified check of the Bidder or a bid bond duly executed by

the Bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of five percent (5%) of the bid. Such cash, checks or bid bonds will be returned to all except the three lowest bidders within three (3) days after the opening of bids and the remaining cash, checks, or bid bonds will be returned promptly after the Owner and the accepted Bidder have executed the contract. The awarding of a contract to the lowest responsible bidder or bidders shall be made within sixty (60) days after the opening of bids unless the governing body of the awarding public agency, by formal recorded action and for good cause shown, provides for a reasonable extension of that period, which extension period shall not in any event exceed fifteen (15) days where only state or local funds are involved, or not to exceed ninety (90) days on any award of contract for the construction of a public improvement where funds are utilized which are furnished by an agency of the United States Government.

10. Liquidated Damages for Failure to Enter into Contract

The successful bidder, upon his failure or refusal to execute and deliver the contract and bonds required within ten (10) days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

11. Time of Completion and Liquidated Damages

Bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within **300** consecutive calendar days thereafter. Bidder must also agree to pay liquidated damages for each consecutive calendar day thereafter as hereinafter provided in General Conditions 208.07.

12. Conditions of Work

Each bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract. Insofar as possible, the contractor, in carrying out his work, must employ all methods or means as will not cause any interruptions of or interference with the work of any other contract.

13. Addenda and Interpretations

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally.

A. Should a Bidder find discrepancies in or omissions from the Bid Documents, or be in doubt as to their meaning or intent, he must notify and request a clarification from the Owner in writing. All interpretations and clarifications considered necessary by the Owner shall be issued to all Bidders of record as Addenda to the Bid Documents and shall become part of the Contract. All questions are to be received from the Bidders by March 16, 2022, by 5:00pm. Any questions received after this date, shall not be answered. The Owner shall not be responsible for oral clarification. All Addenda items issued during the time of bidding shall be covered in the Bid and acknowledged on the proposal.

B. If any person contemplating submitting a Bid for the proposed Contract is in doubt as to the meaning of any part of the Contract Documents shall submit questions, in writing, to the Owner for clarification or interpretation. The Owner shall log this request, obtain the appropriate answer, and if necessary, issue a response in the form of an Addendum to all bidders of record. The Bidder shall submit all requests to the following person:

Mr. Geoff Evans
Planning Design Group
5314 South Yale Ave., Suite 510
Tulsa, Oklahoma 74135
Phone: (918) 628-1255
Email: gevans@pdgtulsa.com

Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be emailed with return receipt requested to all prospective bidders (at the respective email addresses furnished for such purposes). Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under this bid as submitted. All addenda so issued shall become part of the contract documents and shall be acknowledged on the proposal form.

14. Security for Faithful Performance

Simultaneously with his delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner.

15. Power of Attorney

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of this power of attorney.

16. Notice of Special Conditions

Attention is particularly called to those parts of the contract documents and specifications that deal with the following:

a. Inspection and testing of materials
b. Insurance requirements

17. Laws and Regulations

The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

18. Obligation of Bidder

At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or documents shall in no way relieve any bidder from any obligation in respect to his bid.

19. Disqualification of Bidders

No contract will be awarded to any persons, firm, partnership, company, or corporation in arrears to the City of Shawnee upon a debt or contract, or in default as surety or otherwise upon any obligation to the City of Shawnee.

20. Exemption from State and Local Sales Tax

Omit sales tax on this project in compliance with provisions set forth in Sections 1356(A), 1356(B) and 1356(I) of Title 68 of the Oklahoma Statutes. Both the named Contractor and subcontractors, in accordance with such Statutes and consistent with the Oklahoma Tax Commission Decision No. M8700147 in the execution of a public contract will be exempt after having been duly appointed as purchasing agents by the public entity. The Owner will appoint the Contractor and subcontractor as agents for the City of Shawnee for this project on a state and local sales tax exempt basis in accordance with the foregoing authorities. A copy of the Appointment of Agent form is included in the Contract Documents.

21. Noncollusion Affidavits:

A. The Bidder shall be required to execute and submit as a part of his bid the Owner's Noncollusion Affidavit. Refer to the enclosed form 74 OS 85.22 (Bid)
B. The Contractor (successful bidder) shall be required to execute and submit as a part of executing the Contract, the Owner's Noncollusion Affidavit. Refer to the enclosed form 74 OS 85-23 (Contract).

22. Nondiscrimination Certificate

The bidder shall be required to execute and submit as a part of their bid the Owner's Nondiscrimination Certificate. Refer to the enclosed form.

23. Anti-Kickback Affidavit

The bidder shall be required to execute and submit as a part of their bid the Owner's Anti-Kickback Affidavit. Refer to the enclosed form.

24. Proposal

Before submitting the Proposal, carefully examine all Bid Documents, visit the site, examine existing conditions and limitations, and include a sum to cover the cost of all items included in the Bid Documents. Failure or omission of the Bidder to receive or examine any form, instrument, Addendum or other documents, or visit the site and acquaint himself with existing conditions shall not relieve the Bidder from obligations with respect to his Bid or to Contract requirements. Submission of the Proposal shall be taken as prima facie evidence of the Contractor's acceptance of and intent to comply with the Bid Documents.

A. Proposals shall be made only on the form provided in these specifications. All blank spaces on the form shall be completed (fully filled out), bids stated both in writing (words) and numerically, signatures signed in longhand, and form completed without interlineations, alteration or erasure. Oral, telegraphic or telephonic proposal or modifications shall no be accepted.

B. Proposals may contain pre-approved alternate proposals in accordance with the conditions outlined in these Specifications.

C. Proposals shall be delivered to the place designated, on or before the day and hour set for the opening of Bids. It is the sole responsibility of the Bidder to deliver the Proposal before the scheduled closing time. Bids received after the scheduled closing time shall be returned unopened.

D. In the event of a discrepancy between prices quoted in writing (words) and those quoted numerically, writing shall govern. Unit Prices shall govern over totals. All prices shall include the furnishing of materials equipment, tools and all other facilities and performance of labor and services necessary for proper completion of the Work specified herein.

E. Proposals shall not contain any recapitulation of the Work to be done.

F. The Bid shall contain an acknowledgment of receipt of all Addenda issued by the Owner. The Bidder must fill in the number and date of each addendum.

G. Failure of the Bidder to properly fill out the Form of Proposal, provide proper bonding, or provide all necessary documents and affidavits as required by these Contract Documents, shall be grounds for rejection of the Bid by the Owner.

25. Bonds

A. The Contractor(s) shall furnish and pay for a Performance Bond, Statutory Bond and Maintenance Bond in accordance with these documents. Furnish bonds in such form as the Owner may prescribe and with a surety company licensed to conduct business in the State of Oklahoma and acceptable to the Owner. The Bidder shall deliver said bonds to the Owner, no

later than fifteen (15) business days after the date of the Notice to Award. Failure or neglecting to deliver said bonds, as specified, shall be considered as having abandoned the Contract and the bid security shall be retained as liquidated damages.

B. In lieu of the required Bonds, the Contractor(s) may provide an irrevocable letter of credit complying with the provisions of Sections 1 and 2, Title 61 of the Oklahoma Statutes: and containing such terms as may be prescribed by the Department of Central Services issued by a solvent financial institution insured by the Federal Deposit Insurance Corporation for the Benefit of the State of Oklahoma, on behalf of the awarding public agency, in a sum equal to the bond price, to ensure the proper and prompt completion of the Work in accordance with the provisions of the contract and bidding documents and to protect the awarding public agency against defective workmanship and materials for a period of two (2) years after final acceptance of the Project by the Owner.

26. Subcontractors, Suppliers, and Others

A. If the Owner, after due investigation, has a reasonable objection to any proposed subcontractor or supplier, other person or organization, the Owner will request the apparent successful bidder to submit an acceptable substitute without an increase in the Bid Price. Prior to the Notice of Award, if the apparent successful bidder declines to provide the acceptable substitute for the project, the Owner may, at their option, award the contract to the next qualified bidder. If the Owner awards the contract to another bidder, the bid security will be returned to the original apparent successful bidder.

B. No Contractor shall be required to employ a subcontractor, supplier, or other person and/or organization against whom the Contractor has reasonable objection.

27. Surface and Subsurface Conditions

The bidder shall exercise due diligence in making determinations which would concern any complications or difficulties due to surface or sub-surface conditions. Accordingly, based upon Contractor's due diligence, the City of Shawnee is indemnified from any additional work, additional costs whatsoever incurred arising out of sub-surface water, clay conditions, soil conditions, or other difficulties or hardships which might arise as a result of surface or sub-surface conditions of a geographical or hydrological nature.

28. METHOD OF PAYMENT

A. The Contractor(s) shall be paid for installed materials (Work completed in place), which have been approved by the Owner, based upon the prices identified on the Proposal.
B. The Contractor(s) shall submit monthly invoices for consideration by the Owner. The invoices shall be submitted on a form approved by the Owner. The invoices will clearly itemize the amount of each material installed, the prices, the total for each item, and the total amount.
C. The Owner will withhold five (5%) percent retainage from each invoice until completion of the project and final written approval by the Owner (acceptance of the installed Work).

29. Affidavit of Claimant

With each pay estimate the Contractor shall execute a copy of the Affidavit of Claimant included in the Contract Documents.

PROPOSAL

KIDS SPACE PARK IMPROVEMENTS PROJECT
CITY OF SHAWNEE, OKLAHOMA

Date_____

Proposal of _____

(hereinafter called "Bidder"), organized and existing under the laws of the State of _____,

doing business as _____.*

To the **City of Shawnee, Oklahoma** (hereinafter called "Owner").

Gentlemen:

The Bidder, in compliance with your invitation for bids for the **Kids Space Park Improvements Project** having examined the Plans and Specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials and supplies, and to construct the project in accordance with the contract documents, within the time set forth therein, and at the unit prices stated below. These prices are to cover all expenses incurred in performing the work required under the contract documents, of which this Proposal is a part.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within **300 consecutive calendar days** thereafter as stipulated in the specifications. **Bidder further agrees to pay as liquidated damages in accordance with section 208.07.**

Each unit Price space provided herein shall be filled out by the bidder and shall become a part of the Base Proposal. Prices quoted herein shall include all amounts that would be payable to the Contractor in case of additions to the Contract, or would be deducted from the Contract sum by the Owner in case of reductions. Unit Prices shall include all expenses incurred in performing all of the work required under the Contract Documents as applicable to the unit item, including taxes payable, labor, material, equipment, supplies, supervision, overhead and profit. It is expressly stated that the Contract Sum is derived from the entire work as called for in the Contract Documents and while these Unit Prices may or may not have been used in the computing the Contract Sum, their inclusion here is for the purpose herein described, and the Owner reserves the right to deduct from the Base Proposal or add to the Base Proposal any of the item's prices or portions thereof at the price quoted herein either before or after Contract awarding.

This proposal is based on the Contract Documents, Technical Specifications and Drawings as listed in the Table of Contents and any addendum issued.

Bidder acknowledges receipt of the following addendum:

NUMBER:	DATE:	NUMBER:	DATE:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* Insert "a corporation", "a partnership" or an "individual", as applicable.

Bidder agrees to perform all the construction described in the specifications and shown on the Plans for the following unit prices: (NOTE: Bids shall include applicable taxes and fees.)

Unit prices in Base Bid and Add Alternates must contain the same Unit Price when Bid Items Identical. If Unit Prices vary from Base Bid and Alternate Bid Items, the lower of the Unit Prices will be used for all Identical Bid Items.

For the performance of all the work necessary to complete the work under Bid Schedule, as defined in the Contract Documents.

BID FORM

BASE BID PAY ITEMS

Item	Description	Unit	Quantity	Amount
1	General Conditions/Bonds/Insurance	LS	1	
	@_____Dollars	($_____)	=	$_____
2	Earthwork-Excavation/Embankment/Compaction/Grading - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
3	Demolition - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
4	Filter Fabric/Silt Fence - CIP	LF	2,000	
	@_____Dollars	($_____)	=	$_____
5	Site Electrical Including Lighting - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
6	Site Water Line Renovations - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
7	Imported Select Fill/Topsoil as Needed - CIP	CY	300	
	@_____Dollars	($_____)	=	$_____
8	Pond Outlet Structure - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
9	Flexamat - CIP	SF	124	
	@_____Dollars	($_____)	=	$_____
10	Parking Lot - Curb and Gutter - CIP	LF	198	
	@_____Dollars	($_____)	=	$_____
11	Parking Lot - S4 Asphalt Paving - CIP	TONS	30	
	@_____Dollars	($_____)	=	$_____
12	Parking Lot - S3 Asphalt Paving - CIP	TONS	49	
	@_____Dollars	($_____)	=	$_____
13	Parking Lot - Tack Coat Application - CIP	GAL	17	
	@_____Dollars	($_____)	=	$_____
14	Parking Lot - ODOT Type A - CIP	CY	87	
	@_____Dollars	($_____)	=	$_____
15	Parking Lot - Striping - CIP	LF	320	
	@_____Dollars	($_____)	=	$_____
16	4" Thick Concrete Pavement - CIP	SF	23,580	
	@_____Dollars	($_____)	=	$_____
17	4" Thick Concrete Pavement (Perimeter Trail) - CIP	SF	8,927	
	@_____Dollars	($_____)	=	$_____
18	Rubberized Safety Surface w/ Concrete Base-CIP	SF	12,170	
	@_____Dollars	($_____)	=	$_____
19	Synthetic Turf (flat) - CIP	SF	13,315	
	@_____Dollars	($_____)	=	$_____
20	Synthetic Turf (berm) - CIP	SF	4,735	
	@_____Dollars	($_____)	=	$_____
21	12' X 12' Shade Structure - CIP	EA	5	
	@_____Dollars	($_____)	=	$_____
22	16' X 16' Shade Structure - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____

Item	Description	Unit	Quantity	Amount
23	Architectural Pavilion - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
24	Restroom Building - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
25	Cantilevered Shade Structure - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
26	Large T Type frame Fabric Stucture - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
27	Playground Equipment with Installation - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
28	Playground Drainage - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
29	Pickleball Court (2 Total) - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____
30	Multi-Use Court 60'x94' - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
31	Basketball Goal - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____
32	Horseshoe Court - CIP (with Synthetic Turf)	EA	2	
	@_____Dollars	($_____)	=	$_____
33	Outdoor Metal Ping Pong Table - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____
34	Stainless Steel Cornhole Boards - CIP (Per Set)	EA	2	
	@_____Dollars	($_____)	=	$_____
35	Jumbo Size Chess/Checker Board - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
36	1'W. Concrete Curb (For Pickleball Fence) - CIP	LF	234	
	@_____Dollars	($_____)	=	$_____
37	6"W. Concrete Curb - CIP	LF	825	
	@_____Dollars	($_____)	=	$_____
38	Lounge Chairs - CIP	EA	12	
	@_____Dollars	($_____)	=	$_____
39	Square Picnic Tables - CIP	EA	11	
	@_____Dollars	($_____)	=	$_____
40	ADA Sq. Picnic Tables - CIP	EA	7	
	@_____Dollars	($_____)	=	$_____
41	Benches - CIP	EA	15	
	@_____Dollars	($_____)	=	$_____
42	Landscape Stone - CIP	EA	22	
	@_____Dollars	($_____)	=	$_____
43	12' X 12' Fabric Umbrella - CIP	EA	9	
	@_____Dollars	($_____)	=	$_____
44	Trash Receptacles - CIP	EA	10	
	@_____Dollars	($_____)	=	$_____
45	Outdoor Grill - CIP	EA	6	
	@_____Dollars	($_____)	=	$_____

Item	Description	Unit	Quantity	Amount
46	Jumbo Size Park Signage - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
47	Rules Signage - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
48	4'H. Wireworks Plus Fence - CIP	LF	1,995	
	@_____Dollars	($_____)	=	$_____
49	Trees - CIP	EA	72	
	@_____Dollars	($_____)	=	$_____
50	U-3 Bermuda Solid Sod - CIP	SF	60,000	
	@_____Dollars	($_____)	=	$_____
51	Construction Allowance	LS	1	
	@_____Dollars	**($ 75,000.00)**	=	**$ 75,000.00**

TOTAL BASE BID ITEMS_____Dollars ($_____)

BASE BID PAY ITEMS

Item	Description	Unit	Quantity	Amount
A-1a	Demo and Removal of Existing Fencing - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
A-1b	5' HT Chain Link Fence - CIP	LF	1,167	
	@_____Dollars	($_____)	=	$_____
A-2	Basketball Sports Lighting - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
A-3	Pickleball Sports Lighting - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____

TOTAL ALTERNATE BID ITEMS_____Dollars ($_____)

TOTAL BASE & ALTERNATE BID_____Dollars ($_____)

CIP = COMPLETE IN PLACE

Lowest and best bidder will be determined by the sum of the Base Bid and all, some, or none of the Add Alternates. The City reserves the right to award all, some, or none of the Add Alternates.

The Owner reserves the right to waive any informality or to reject any or all bids.

Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words for unit prices will govern.

The above unit prices shall include all labor, materials, overhead, profit, insurance, etc. to cover the finished work of the several kinds called for.

Bidder understands that the Owner reserves the right to reject any or all bids in accordance with their best interests.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this Bid, Bidder will execute the formal contract attached within ten (10) days and deliver a Surety Bond or Bonds as required by the General Conditions. The bid security attached in the sum of _____ Dollars ($_____) is to become the property of the Owner in the event the contract and bonds are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

Respectfully submitted,

By: _____

_____
Type or Print Name

Title: _____

_____
Business Address

_____

(S E A L - if bid is by a corporation)

_____

NONCOLLUSION AFFIDAVIT
74 92 85.22 (BID)

STATE OF OKLAHOMA)
COUNTY OF _____)

_____, of lawful age, being first duly sworn, on oath says:

1. He/she is the duly authorized agent of _____, the BIDDER submitting the competitive Bid which is attached to this statement for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and City officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to the bid to which this statement is attached.
2. He/she is fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and has been personally and directly involved in the proceedings leading to the submission of such bid; and
3. Neither the bidder nor anyone subject to the bidder's direction or control has been a party:
    a. To any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,
    b. To any collusion with any City official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor
    c. In any discussions between bidders and any City official concerning exchange of money or other thing of value for special consideration in the letting of a contract.

_____
Authorized Agent

SUBSCRIBED AND SWORN to before me this _____ day of _____, 202__.

_____
Notary Public

My Commission Expires: _____

NONDISCRIMINATION CERTIFICATE

STATE OF OKLAHOMA)
COUNTY OF _____)

I, _____ do here by certify that I am the _____ of the _____, a corporation, partnership, or sole proprietorship.

I further certify that I have this date, submitted a bid to the **City of Shawnee, Oklahoma** pursuant to the solicitation for bids dated _____, 202___.

I certify that if I am the successful Bidder on the Project, I will not discriminate against anyone in the employment or employment practices because of race, creed, color, sex, national, origin, religion, handicap or age. I will comply with all federal and state laws and executive orders concerning the subject of nondiscrimination.

By: _____

_____
Title

SUBSCRIBED AND SWORN to before me this ____ day of _____, 202___.

_____
Notary Public

My Commission Expires: _____

ANTI-KICKBACK AFFIDAVIT

STATE OF OKLAHOMA
COUNTY OF _____

_____, of lawful age, being first duly sworn, on oath says:

1. He/she is the duly authorized agent of_____., the CONTRACTOR under the contract which is attached to this statement for the purpose of certifying the facts pertaining to the offering or giving of money or other things of value directly or indirectly to government personnel in order to procure said contract..
2. He/she is fully aware of the facts and circumstances surrounding the making of the contract to which this statement is attached and has been personally and directly involved in the proceedings leading to the procurement of said contract; and
3. Neither the Contractor nor anyone subject to the Contractor's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of The City of Shawnee or the Shawnee Public Works Authority, any money or other things of value, either directly or indirectly, in procuring the contract to which this statement is attached.

_____
Authorized Agent

SUBSCRIBED AND SWORN to before me this _____ day of _____, 202___.

_____
Notary Public

My Commission Expires: _____

BUSINESS RELATIONSHIPS AFFIDAVIT

STATE OF _____}
} SS
COUNTY OF _____}

_____, of lawful age, being first duly sworn, on oath, says that (he/she) is the agent authorized by the Bidder to submit the attached Bid.

Affiant further states that the nature of any partnership, joint venture, or other business relationship presently if effect, or which existed within one (1) year prior to the date of this statement with the architect, engineer, or other party to the project is as follows:

_____

_____

_____

Affiant further states that any such business relationship presently in effect, or which existed within one (1) year prior to the date of this statement between any officer or director of the Bidding company and any officer or director of the architectural or engineering firm or other party to the project, is as follows:

_____

_____

_____

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

_____

_____

_____

(If none of the business relationships hereinabove mentioned exist, Affiant should so state.)

_____

SUBSCRIBED AND SWORN TO before me this_____ day of _____, 202___.

_____

My Commission Expires: Notary Public

_____

C O N T R A C T

Kids Space Park Improvements Project

THIS CONTRACT AND AGREEMENT, made and entered into this _____ day of _____ , 202___, by and between **The City of Shawnee, Oklahoma,** Party of the First Part, hereinafter termed "Owner" and_____Party of the Second Part, hereinafter termed "Contractor".

W I T N E S S E T H :

WHEREAS, The City of Shawnee, Oklahoma (Owner) has caused to be prepared in accordance with law, certain Plans, Specifications, and other Bidding Documents for The Work hereinafter described and has approved and adopted all of said Bidding Documents, and has caused Solicitation for Bids to be given and advertised as required by law, and has received sealed Proposals for the furnishing of all labor and materials for _____ as outlined and set out in the Bidding Documents and in accordance with the terms and provisions of said Contract; and,

WHEREAS, Contractor, in response to said Solicitation for Bids, has submitted to Owner in the manner and at the time specified, a sealed Proposal in accordance with the terms of this Contract; and,

WHEREAS, the Owner, in the manner provided by law, has publicly opened, examined, and canvassed the Proposals submitted and has determined and declared the above-named Contractor to be the lowest responsible Bidder on the above-described project, and has duly Awarded this Contract to said Contractor, for the sum name in the Proposal, to-wit:_____
Dollars ($_____):

NOW, THEREFORE, for and in consideration of the mutual agreements and covenants herein contained, the parties to this Contract have agreed, and hereby agree, as follows:

1. The Contractor shall, in a good and first-class, workmanlike manner, at his own cost and expense, furnish all labor, materials, tools, and equipment required to perform and complete said Work in strict accordance with this Contract and the following Contract Documents:

   _____ all of which documents are on file in the office of the Owner: **The City of Shawnee, Oklahoma at 16 West 9th Street, Shawnee, Oklahoma 74801**, and
   are made a part of this Contract as fully as if the same were herein set out at length, with the following additions and exceptions: (If none, so state)_____
   _____

2. The Owner shall make payments to the Contractor in the following manner: On or before the last working day of each month, the agency engineer, or other appropriate person, will make accurate estimates of the value, based on contract prices, of work done and materials incorporated in The Work and of materials suitably stored at the site thereof during the preceding calendar month. The Contractor shall furnish to the agency engineer, or other appropriate person, such detailed information as he may request to aid him as a guide in the preparation of the monthly estimates.

   Each monthly estimate for payment must contain or have attached an affidavit as required by Senate Bills 469 and 565 of the 1974 Legislature.

2-a. Contractor expects to store during the construction period certain materials and equipment on site. Contractor assumes full responsibility for any theft, loss or damage to materials stored on site. The City of Shawnee assumes no responsibility for any loss, damage or theft of any equipment, tools or supplies occurring during period of construction.

3. On completion of The Work, but prior to the acceptance thereof by the Owner, it shall be the duty of the agency engineer, or other appropriate person, to determine that said Work has been completely and fully performed in accordance with said Contract Documents; and upon making such determination said official shall make his final certificate to the Owner. The Contractor shall furnish proof that all claims and obligations incurred by him in connection with the performance of said Work have been fully paid and settled; said information shall be in the form of an affidavit, which shall bear the approval of the Surety on the Contract Bonds for payment of the final estimate to the Contractor; thereupon, the final estimate (including retainages) will be approved and paid.

4. The sworn, notarized statement below must be signed and notarized before this Contract will become effective.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed, in four (4) duplicate originals, the day and year first above written.

PARTY OF THE SECOND PART:

CONTRACTOR: _____

By_____
Title: _____

ATTEST:

_____
Title: _____

(SEAL)

PARTY OF THE FIRST PART:

OWNER: City of Shawnee, Oklahoma

By_____
Mayor

ATTEST:

_____
City Clerk

(SEAL)

STATE OF _____}
} SS
COUNTY OF _____}

_____, of lawful age, being first duly sworn, on oath says that (he/she) is the agent authorized by Contractor to submit the above Contract to the Owner.

Affiant further states that Contractor has not paid, given, or donated or agreed to pay, give, or donate to any officer or employee of Owner any money or other thing of value, either directly or indirectly, in the procuring of the Contract.

_____
Title: _____

SUBSCRIBED AND SWORN TO BEFORE ME, this____ day of _____, 202___.

_____
Notary Public

My Commission Expires:

_____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT _____ ,as Principal, and _____, a corporation organized under the laws of the State of Oklahoma and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto **The City of Shawnee, Oklahoma** (Owner) in the penal sum of _____ Dollars ($_____) in lawful money of the United States of America, for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees, successors and assigns, jointly and severally, firmly by these presents.

Dated this _____ day of _____ , 202___.

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written Contract with **The City of Shawnee, Oklahoma** (Owner), dated this _____ day of _____, 202___, for the **Kids Space Park Improvements Project** in compliance with the Plans and Specifications therefore, made a part of said Contract and on file in the office of **The City of Shawnee, Oklahoma** (Owner) at 16 West 9th Street, Shawnee, Oklahoma 74801.

NOW, THEREFORE, if said Principal shall, in all particulars well, truly, and faithfully perform and abide by said Contract and each and every covenant, condition and part thereof and shall fulfill all obligations resting upon said Principal by the terms of said Contract and said Specifications; and if said Principal shall promptly pay, or cause to be paid, all labor, materials and/or repairs and all bills for labor performed on said Work, whether by subcontract or otherwise; and if said Principal shall protect and save harmless said **The City of Shawnee, Oklahoma** (Owner) from all loss, damage, and expense to life or property suffered or sustained by any person, firm, or corporation caused by said Principal or his or its agents, servants, or employees in the construction of said Work, or by or in consequence of any negligence, carelessness or misconduct in guarding and protecting the same, or from any act or omission of said Principal or his or its agents, servants, or employees, and if said Principal shall protect and save **The City of Shawnee, Oklahoma** (Owner) harmless from all suits and claims of infringement or alleged infringement or patent rights or processes, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

PRINCIPAL:

_____

ATTEST: By _____

_____

SURETY:

_____

By _____
Attorney-in-Fact

STATUTORY BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT _____, as principal, and _____ a Corporation organized under the laws of the State of Oklahoma, and authorized to transact business in the State of Oklahoma as Surety, are held and firmly bound unto the **State of Oklahoma**, in the penal sum of _____ _____ Dollars ($_____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

Signed, sealed and delivered this _____ day of _____, 202__.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT WHEREAS, the said _____ has on this _____ day of _____, 202___, entered into a written contract with **The City of Shawnee, Oklahoma** for the **Kids Space Park Improvements Project** according to the plans and specifications attached to said contract, which include the furnishing of all necessary labor, tools, equipment and materials, in accordance with the plans and specifications contained in said contract and made a part thereof, which contract, plans and specifications are by reference thereto made a part of this Bond.

NOW, THEREFORE, if said _____ shall pay all indebtedness incurred for labor, tools, equipment or materials furnished or consumed in connection with the construction of the said contract work, then this obligation shall become null and void; otherwise, to be in full force and effect.

PRINCIPAL

_____

By: _____
Signature & Title

ATTEST:

_____

SURETY:

_____

By: _____
Attorney-in-Fact

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT _____
as Principal, and _____
a corporation organized under the laws of the State of _____
and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto **The City of Shawnee, Oklahoma** (Owner) in the penal sum of _____ Dollars ($_____) in lawful money of the United States of America for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents.

Dated this _____ day of _____, 202__.

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written Contract with **The City of Shawnee, Oklahoma** (Owner) dated _____ 202__**,** for the **Kids Space Park Improvements Project** all in compliance with the plans and specifications therefore, made a part of said Contract, and on file in the office of **The City of Shawnee, Oklahoma** (Owner) at **16 West 9th Street, Shawnee, Oklahoma 74801.**

NOW, THEREFORE, if said Principal shall pay or cause to be paid **The City of Shawnee, Oklahoma** (Owner) all damage, loss and expense which may result by reason of defective materials and/or workmanship in connection with said work, occurring within a period of two (2) years for all projects, from and after acceptance of said project by **The City of Shawnee, Oklahoma** (Owner); and if Principal shall pay or cause to be paid all labor and materials, including the prime contractor and all subcontractors; and if Principal shall save and hold **The City of Shawnee, Oklahoma** (Owner) harmless from all damages, loss and expense occasioned by or resulting from any failure whatsoever of said Principal, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

PRINCIPAL:

By:_____
Signature & Title

ATTEST:

SURETY:

_____

_____

By_____
Attorney-in-Fact

NONCOLLUSION AFFIDAVIT
74 92 85.22 (CONTRACT)

STATE OF OKLAHOMA)
COUNTY OF _____)

_____, of lawful age, being first duly sworn, on oath says:

1. He/she is the duly authorized agent of _____, the CONTRACTOR under the contract which is attached to this statement for the purpose of certifying the facts pertaining to the giving or offering or giving of things of value to government personnel in order to procure said contract; and,.

2. He/she is fully aware of the facts and circumstances surrounding the making of the contract to which this statement is attached and has been personally and directly involved in the proceedings leading to the procurement of said contract; and

3. Neither the Contractor nor anyone subject to the Contractor's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of The City of Shawnee, any money or other things of value, either directly or indirectly, in procuring the contract to which this statement is attached.

_____
Authorized Agent

SUBSCRIBED AND SWORN to before me this _____ day of _____, 202__.

_____
Notary Public

My Commission Expires: _____

CLAIM or INVOICE AFFIDAVIT

STATE OF OKLAHOMA)
) SS
COUNTY OF_____)

The undersigned Contractor, of lawful age, being first duly sworn, on oath says that his invoice or claim is true and correct. Affiant further states that the work and materials as shown by this claim have been completed in accordance with the Plans, Specifications, orders or requests furnished the affiant. Affiant further states that (s)he has made no payment, given or donated or agreed to pay, give or donate, either directly or indirectly, to any elected official, officer or employee of the State, County, City or Authority of money or any other thing of value to obtain payment or the Award of this Contract.

_____
Contractor

Subscribed and sworn to before me this _____ day of _____, 202___.

_____
Notary Public

My Commission Expires:

_____

APPOINTMENT OF AGENT

The City of Shawnee, Oklahoma hereafter referred to as the "City" does hereby appoint _____., (an individual, partnership, or corporation) doing business in Oklahoma acting through its officers and employees, hereafter referred to as "Agent" of the City for the sole purpose of completing **Kids Space Park Improvements Project** under a contract dated the _____ day of _____, 202__, being constructed in Shawnee, Oklahoma, hereafter referred to as the "Project" for the use of the City. Agent agrees to act as Agent for the City subject to the provisions of this Appointment.

Legal title to all tangible personal property purchased, and the right to direct the use of all tangible personal property rented, by the Agent pursuant to this Appointment shall pass directly from the vendor to the City. Agent shall designate on its purchase orders and elsewhere as appropriate when it is making purchases pursuant to this appointment, following legend:

> _____ has been appointed Agent for the City of Shawnee, Oklahoma for the purpose of the property described herein. Upon passage of title all of such property will be included in the project owned by the City. Title to all such property shall pass to said City from the vendor F.O.B. place specified in this purchase order. All such property is exempt from Oklahoma sales and use taxes and /or City sales tax."

Rental agreements relating to such property shall contain suitable provisions which disclose the Agent's agency and indicate that no Oklahoma sales or use tax or City sales tax is payable.

Agent agrees no to purchase or rent any tangible personal property pursuant to this Appointment unless such property is authorized for inclusion in or exclusive use in the construction of the Project described above. Agent shall not have the power to appoint any other person or entity as Agent for the City.

Agent shall be responsible in a separate capacity for payment of the purchase price or other consideration for the property purchased or rented as Agent and shall not have the power to bind the City to any financial or other commitments or obligations. Agent shall hold the City harmless from any liability for or arising out of the purchase, rental or use of the property purchased or rented hereunder.

This Appointment shall be effective upon execution by the City acting through the City Manager and by the Agent and shall be binding upon the successors of the parties hereto.

Executed by the undersigned Manager of the City of Shawnee, State of Oklahoma, on behalf of the City of Shawnee, on this _____ day of _____, 202__.

CITY OF SHAWNEE, OKLAHOMA

BY: _____ _____
City Manager Tax Exemption Number

ATTEST: _____
City Clerk

AGENT'S MAILING ADDRESS: Company Name: _____

Address: _____.

City, State, Zip: _____

SPECIAL PROVISIONS

101 EXISTING UTILITIES

Contractor shall be responsible for locating existing utilities in the area of construction prior to any work being done. All conflicts should be reported to the Engineer. Any work done in the area of a conflict without the Engineer's knowledge shall be at the Contractor's own risk.

102 SALVAGEABLE MATERIALS

All materials which are salvageable, as determined by the Engineer and/or Owner, shall remain the property of the Owner. Those materials deemed to be unsalvageable shall be properly disposed of by the contractor.

103 TESTING

The Owner will have performed and pay for the costs of all tests required by the Engineer such as densities and concrete strength. Contractor shall assist as required, in the performance of these tests.

Re-testing required by the failure of original tests not meeting the specifications will be required by the Owner to be paid for by the contractor.

104 CONSTRUCTION LINES AND GRADES

The new fence shall be located on the same alignment as the existing fence where an existing fence exists. If an existing fence does not exist the new fence shall be located at a location established by the Owner.

It shall be the responsibility of the Contractor to set, protect and maintain basic control points to define the existing fence location until the new fence is installed.

105 UNDERGROUND INSTALLATIONS AND STRUCTURES

Pipelines and other existing underground installations and structures in the vicinity of the work to be done hereunder are indicated on the drawings according to information available to the Engineer; however, all lines actually existing may not be shown. The Contractor shall make every effort to locate all underground pipelines, conduits, and structures by contacting owners of underground utilities and by prospecting in advance of trench excavation.

106 UNFORESEEN CONDITIONS

The bidder shall exercise due diligence in making determinations which would concern any complications or difficulties due to surface or sub-surface conditions. Accordingly, based upon Contractor’s due diligence, the City of Shawnee is indemnified from any additional work, additional costs whatsoever incurred arising out of sub-surface water, clay conditions, soil conditions, or other difficulties or hardships which might arise as a result of surface or sub-surface conditions of a geographical or hydrological nature.

107 WORKING DAYS

The calendar days in this contract have been established based on the average number of working days each month base on ODOT standards. The Contractor is to submit a request for adverse weather days with each Pay Application. The City of Shawnee and the Design Consultant, will provide a response including acceptance or denial of adverse weather days.

108 PAY ITEMS

Any work shown on the plans or required for a complete project and not covered by a bid item shall be considered incidental to the project and included in the price for listed bid items.

GENERAL CONDITIONS

SECTION 201 - DEFINITION OF TERMS

201.1 DEFINITIONS:

Wherever the words, forms or phrases herein defined, or pronouns used in their stead, occur in these Specifications in the Contract, or in the Advertisement, or any Document, or instrument herein contemplated, or to which these Specifications apply, the intent and meaning shall be interpreted as follows:

AASHTO - The American Association of State Highway and Transportation Officials.

Act of God - An earthquake, flood, cyclone or other cataclysmic phenomenon of nature. Rain, wind, flood or other natural phenomenon of normal intensity for the locality shall not be construed as an Act of God.

Advertisement - All of the legal publications pertaining to The Work contemplated or under Contract.

AGA - The American Gas Association

ANSI - The American National Standards Institute (formerly the American Standards Association).

Architect, Landscape Architect or Engineer – Architect, Landscape Architect or Engineering Company or their duly authorized agents.

ASA - The American Standards Association. (Now designated as the American National Standards Institute.) ASA and ANSI, where used in these Specifications, shall denote the American National Standards Institute.

ASTM - The American Society for Testing Materials.

Award - The decision of the Owner to accept the Proposal of the lowest and best Bidder for The Work, subject to the execution and approval of a satisfactory Contract and the required Bonds therefore, and to such other conditions as may be specified or otherwise required by law.

AWWA - The American Water Works Association.

Beneficial Occupancy - A period in time determined by the Engineer when the Owner permanently occupies The Work or a portion thereof. The Contractor will be required to furnish a release from his Surety and from his insurance carrier prior to the establishment of beneficial occupancy.

Bidder - Any person or persons, partnership, company, firm or corporation acting directly or through a duly authorized representative submitting a Proposal for The Work contemplated.

Change of Address - If shall be the duty of each party to advise the other parties to the Contract as to any change in his business address until completion of the Contract.

Contract - The Agreement covering the performance of The Work described in the Contract Documents including all supplemental agreements thereto and all General and Special Conditions pertaining to The Work or materials thereof.

Contract Documents - The Contract Documents comprise the following documents, including all additions, deletions and modifications incorporated therein:

A. Legal and Procedural Documents

1. Advertisement
2. Instructions to Bidders
3. Proposal
4. Proposal Guaranty
5. Contract
6. Performance Bond
7. Statutory Bond
8. Maintenance Bond
9. Experience and Equipment Questionnaire (if required)
10 Special Equipment Questionnaire (if required)
11. Addenda
12. Change Orders

B. Special Conditions of the Contract

C. General Conditions of the Contract

D. Detailed Specification Requirements

E. Drawings - Bound separately or with the Specifications

Contractor - The person or persons, partnership, company, firm or corporation entering into Contract for the execution of The Work, acting directly or through a duly authorized representative.

Drawings - Those listed in the Index to Specifications and Drawings with all Addenda thereto.

Engineer –The City of Shawnee Engineers or their duly authorized agents.

Furnish - To supply.

Maintenance Bond - The approved form of security furnished by the Contractor and his surety as a guarantee that he will maintain The Work constructed by him in good condition for the period of time required.

Owner - The Owner named in the Contract Documents.

Performance Bond - The approved form of security furnished by the Contractor and his Surety as a guaranty of good faith on the part of the Contractor to execute The Work in accordance with the terms of the Contract.

Plan or Plans - All of the Drawings pertaining to the Contract and made a part thereof, including such supplementary Drawings as the Engineer may issue from time to time, in order to elucidate other Drawings for the purpose of showing changes in The Work as authorized under the Section, "Changes and Alterations", or for showing details not shown thereon.

Proposal - The offer of a Bidder to perform The Work described by the Contract Documents when made out and submitted on the prescribed Proposal Form, properly signed and guaranteed.

Proposal Guaranty - The cashier's check or Bidder's Bond accompanying the Proposal submitted by the Bidder, as a guarantee that the Bidder will enter into a Contract with the Owner for the Construction of The Work, if the Contract is awarded to him.

Provide - To furnish and erect or install.

Special Conditions - The special clauses setting forth conditions or requirements peculiar to the specific project involved, supplementing the Standard Specifications and taking precedence over any conditions or requirements of the Standard Specifications with which they are in conflict.

Specifications - The Legal and Procedural Documents, General Conditions of the Contract, together with the modifications thereof, and the detailed Technical Specification requirements, with all Addenda thereto.

Statutory Bond - The approved form of Surety set up and furnished by the Contractor and his Surety as a guarantee that he will pay, in full all bills and accounts for materials and labor used in the construction of The Work, as provided by law.

Subcontractor - Any person, firm or corporation with a direct contract with the Contractor who acts for or on behalf of the Contractor in executing any part of the Contract, but does not include one who merely furnishes material.

Surety - The person, firm or corporation who executes the Contractor's Performance Bond.

The Work - All work, including the furnishing of labor, materials, tools, equipment and incidentals, to be performed by the Contractor under the terms of the Contract.

Working Day - Any day, other than a legal holiday, Saturday or Sunday, on which the approximate normal working forces of the Contractor may proceed with regular work in a manner satisfactory to the Engineer for at least six (6) hours, toward completion of The Work. When it is desirable for any cause to increase the normal working schedule beyond there herein defined, the Contractor shall provide the Engineer with at least twenty-four (24) hours prior notice so that the Engineer and/or Owner may provide for inspection to The Work of the Contractor during such abnormal circumstances.

Written Notice - Written notice shall be considered as served when delivered in person or sent by registered mail to the individual, firm or corporation or to the last business address of such known to him who serves the notice.

SECTION 202 - PROPOSAL REQUIREMENTS AND CONDITIONS

202.01 CONTENTS OF PROPOSAL FORM

The Owner will furnish Bidders with Proposal Forms which will state the general location and description of the contemplated Work and which will contain a list of the items of Work to be done or materials to be furnished and upon which Bid prices are asked. The Contract Form will state the time limits for commencing and for completing The Work and will provide for entering the amount of the Proposal Guaranty. The Proposal Form will contain a Non-Collusion Affidavit.

202.02 INTERPRETATION OF PLANS AND SPECIFICATIONS

If any person contemplating submitting a Bid for the proposed Contract is in doubt as to the true meaning of any part of the Plans, Specifications or other proposed Contract Documents, he may submit to the Engineer a written request for an interpretation thereof. The person submitting such request will be responsible for its prompt delivery. An interpretation of the proposed Documents will be made only by Addendum duly issued and a copy of such Addendum will be mailed or delivered to each person receiving a set of such Documents. The Owner will not be responsible for any other explanations or interpretations of the proposed Documents.

The Drawings are not intended to be scaled for dimensions, and if dimensions not shown on the Drawings are

required, the Contractor shall request them from the Engineer. Where existing utility lines or other sub-surface obstructions are shown on the Drawings, the same have been located as nearly as practicable from information furnished by owners of such, and from such surface indications as may exist at the work site. Such obstructions are shown for the purpose of advising the Contractor that they may interfere with the work to be done hereunder, but not for the purpose of indicating that the work can be performed without such interference.

202.03 EXAMINATION OF DOCUMENTS AND SITE OF WORK

Bidders are required, prior to submitting any Proposal, to read carefully the Specifications, the Proposal, Contract and Bid Forms, to examine carefully all Plans on file with the Owner; to visit the site of The Work; to examine carefully local conditions; to inform themselves by their independent research of the difficulties to be encountered and judge for themselves of the accessibility of The Work and all attending circumstances affecting the cost of doing The Work or the time required for its completion and obtain all information required to make an intelligent Proposal. Bidders shall rely exclusively upon their own estimates, investigations and other data which are necessary for full and complete information upon which the Proposal may be based. It is mutually agreed that submission of a Proposal will be evidence that the Bidder has made the examinations and investigations required herein.

Where soundings are shown on the drawings, the depths are determined by driving a drill rod, using the chum method with water lubrication, to a maximum depth of nine feet or to refusal, whichever is lesser in depth. By showing soundings on the drawings, the City represents only that material of hardness and character which could be penetrated by a drill rod found above the depth of sounding as shown at the point where the drill rod was driven.

Where exploratory drilling is indicated to have been performed on the plans, boring logs will be available for review at the office of the Engineer. The logs will be furnished for information purposes only, and are not to be construed as a true representation of actual subsurface conditions.

202.04 PREPARATION OF PROPOSAL

The Bidder shall submit his Proposal on the Forms furnished by the Owner or the Engineer. All blank spaces in the Proposal Forms shall be correctly filled in and the Bidder shall state the prices, written in ink or typewritten, both in words and numerals, for which he proposes to do The Work contemplated or furnish the materials required.

The Contractor shall include in his Proposal the cash allowances that may be stated in the Special Conditions. The Contractor shall purchase the "Allowed Materials" by soliciting bids, as directed by the Engineer or Owner. If the actual price for purchasing the "Allowed Materials" is more or less than the "Cash Allowance", the Contract price shall be adjusted accordingly. The adjustment in Contract price shall be made on the basis of the purchase price without additional charges for overhead, profit, insurance, or any other incidental expenses. The cost of installation of the "Allowed Materials" shall be included in the applicable sections of the Contract Specifications covering this work.

Wherever the estimated quantities of Work to be done and materials to be furnished under this Contract are shown in any of the Documents including the Proposal, they are given for use in comparing Bids and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete The Work contemplated by this Contract, and such increase or diminution shall in no way vitiate this Contract, nor shall any such increase or diminution give cause for claims or liability for damages.

All prices shall be written distinctly and legibly. In case of conflict between words and numerals, the words will govern. If the Proposal is submitted by an individual, his name must be signed by him or his duly authorized agent and his post office address given. If the Proposal is submitted by a firm or partnership, the name and post office address of each member must be given and the Proposal signed by a member of the firm or partnership as a person duly authorized. If the Proposal is made by a company or corporation, the company or corporate name

and the state under the laws of which said company or corporation is chartered and the business address must be given and one Proposal signed by an official or agent duly authorized. Powers of Attorney, authorizing agents or others to sign Proposals must be properly certified and must be in writing and on file with the Owner.

202.05 PROPOSAL AFFIDAVIT

Each Proposal or copy thereof shall be accompanied by a sworn statement in writing that the person signing the Proposal executed said Proposal in behalf of the Bidder therein named and that he had lawful authority to do so and that said Bidder has not directly or indirectly entered into any agreement, expressed or implied, with any other Bidder or Bidders having for its object the controlling of the amount of such Bid or any Bids, the limiting of Bids or Bidders, the parceling or farming out to any Bidder or Bidders or other persons of any part of the Contract or any Bid or the subject matter of the Bid or of the profits thereof, and that he has not and will not divulge said sealed Bid to any person whatever except those having a partnership or other financial interest with him in said Bid, until after the said sealed Bids are opened.

202.06 PROPOSAL GUARANTY

Proposals will not be considered unless the original filed with the Owner is accompanied by a Bidder's Bond or certified or cashier's check in the required amount, made payable to the Owner. The guaranty shall be in the amount as designated in the Advertisement. The Proposal Guaranty is required as evidence of good faith and as a guarantee that, if awarded the Contract, the Bidder will execute the Contract and furnish the required Bonds within the required time.

202.07 QUESTIONNAIRES

Experience and Equipment Questionnaire are not required for this project.

202.08 FILING OF PROPOSALS

Proposals shall be submitted in accordance with the requirements of the "Notice to Bidders" and the "Instructions to Bidders". Each proposal shall be plainly marked on the envelope with the word "Proposal" and the name of the project.

202.09 WITHDRAWAL OF PROPOSALS

Permission will not be granted to withdraw or modify any Proposal after it has been filed and before the time set for opening Proposals. Request for non-consideration of Proposals must be made in writing, addressed to the Owner and filed with the Owner or his duly authorized representative before the time set for opening Proposals. After other Proposals are opened and read, the Proposal for which withdrawal is properly requested will be returned unopened.

202.10 OPENING OF PROPOSALS

The original Proposals filed with the designated Owner's representative shall be opened in the presence of the Owner at the time stated in the Advertisement and shall thereafter remain on file in the office of said Owner's representative forty-eight (48) hours before any Contract will be entered into based on such Proposals.

Bidders are invited to attend the meeting for opening Proposals at the time set.

202.11 IRREGULAR PROPOSALS

Proposals will be considered irregular if they show any omissions, alterations of forms, additions or conditions not called for, unauthorized alternate Bids or irregularities of any kind. However, the Owner reserves the right to waive technicalities as to changes, alterations or reservations and make the Award in his best interest.

202.12 REJECTION OF PROPOSALS

The Owner reserves the right to reject any or all Proposals, and all Proposals submitted are subject to this reservation. Proposals may be rejected for any of the following specific reasons:

A. Proposal received after the time limit for receiving Proposals as stated in the Advertisement.

B. Proposal prices obviously unbalanced.

C. Summation of Proposal prices on any one project above the Engineer's estimate of cost for such project.

D. Proposal containing any irregularities.

202.13 DISQUALIFICATION OF BIDDERS

Bidders will be disqualified and their Proposals not considered for any of the following specific reasons:

A. Where more than one Proposal for an individual, firm, partnership or corporation is filed under the same or different names and where such Proposals are not identical in every respect.

B. Reasonable grounds for believing that any Bidder is interested in more than one Proposal for The Work contemplated or materials to be furnished.

C. Reason for believing that collusion exists among the Bidders.

D. The Bidder being in arrears on any existing contracts, interested in any litigation against the Owner or having defaulted on a previous contract.

E. Lack of competency, as revealed by the Financial Statement, Experience and Equipment Questionnaires, etc.

F. Uncompleted work which, in the judgment of the Owner, will hinder or prevent the prompt completion of additional Work, if Awarded.

SECTION 203 - AWARD AND EXECUTION OF CONTRACT

203.01 CONSIDERATION OF PROPOSALS

After the Proposals are opened, those Proposals containing unit prices will be tabulated for comparison on the basis of the quantities shown in the approximate estimate. Until the final award of the Contract, the Owner reserves the right to reject any or all Proposals, to waive irregularities and to advertise for new Proposals or proceed to do The Work otherwise when the best interests of the Owner will be promoted thereby.

203.02 AWARD OF CONTRACT

The Owner reserves the right to withhold the Award of the Contract for a reasonable period of time from the date of opening the Proposals and no Award will be made until the necessary investigations are made as to the responsibility of the low Bidder. No Contract will be Awarded until at least forty-eight (48) hours after opening the Proposals. The Awarding of the Contract shall give the Bidder no right of action or claim against the Owner upon such Contract until the execution of the Contract shall have been completed and the Contract delivered to the Contractor. The Owner reserves the right to Award all or any portion or portions of The Work.

203.03 RETURN OF PROPOSAL GUARANTY

As soon as the Proposal prices have been compared, the Owner may, at his discretion return the Proposal Guaranties accompanying those Proposals which, in his judgment, would not be considered in making the Award. After the Award is made, only the successful Bidder's Proposal Guaranty will be retained until the required Contract and Bonds have been executed, after which it will be returned to the Bidder. Should the Awarding of the Contract be delayed more than thirty (30) days, all Bidders' Guaranties will be returned, unless such delay is from causes beyond the control of the Owner and in such event, the Proposal and Bidder's Guaranty, of any Bidder, will be returned at the Bidder's option.

203.04 SURETY BONDS

With the execution and delivery of the Contract, the Contractor shall furnish and file with the Owner in the amounts required, the following Surety Bonds:

A. A Performance Payment Bond in an amount equal to one hundred percent (100%) of the approximate total amount of the Contract, guaranteeing the full and faithful execution of The Work and performance of the Contract and for the protection of the Owner and all property owners interested against any damage by reason of negligence of the Contractor, or the improper execution of The Work or the use of inferior materials.

B. A good and sufficient Statutory Bond in an amount equal to one hundred percent (100%) of the approximate total amount of the Contract, guaranteeing payment for all labor, materials and equipment used in the construction of the improvements.

C. A good and sufficient Maintenance Bond in an amount equal to one hundred (100%) of the total amount of the Contract, guaranteeing the maintenance in good condition of such improvements for a period of one (1) year from and after the time of the completion and acceptance by the Owner of said improvements.

No Surety will be accepted who is now in default or delinquent on any Bond or who is interested in any litigation against the Owner. All Bonds shall be made on forms furnished by the Owner and shall be executed by Surety companies licensed to do business in the State of Oklahoma, and who are acceptable to the Owner. Each Bond shall be executed by the Contractor and the Surety.

Should any Surety on the Contract be determined unsatisfactory at any time by the Owner, notice will be given to the Contractor to that effect, and the Contractor shall forthwith substitute a new Surety or Sureties satisfactory to the Owner.

No payment will be made under the Contract until the new Surety or Sureties, as required, have qualified and have been accepted by the Owner. The Contract shall not be operative, nor shall any payments be due until approval of the Bonds has been made by the Owner.

203.05 EXECUTION OF CONTRACT

The person or persons, partnership, company, firm or corporation to whom a Contract is Awarded shall within ten (10) days after such Award sign the necessary agreements entering into the required Contract with the Owner and execute and deliver the required Bonds.

No Contract shall be binding on the Owner until it has been approved by the Owner's Attorney, executed by the Owner and delivered to the Contractor.

203.06 FAILURE TO EXECUTE CONTRACT

Upon failure of the Bidder to execute the required Bonds or to sign the required Contract within ten (10) days after the Contract is Awarded, he will be considered to have abandoned his Proposal and the Owner may annul the Award. By reason of the uncertainty of market prices of the materials and labor, and it being impracticable and extremely difficult to fix the amount of damages to which the Owner would be put by reason of Bidder's failure to execute said Bonds and Contract within ten (10) days, the Proposal Guaranty accompanying the Proposal shall be the agreed amount of damages which the Owner will suffer by reason of such failure on the part of the Bidder and shall thereupon be retained by the Owner as liquidated damages. The filing of a Proposal will be considered as an acceptance of this provision.

SECTION 204 - SCOPE OF WORK

204.01 INTENT OF PLANS AND SPECIFICATIONS

The intent of the Plans and Specifications is that the Contractor furnish all labor and materials, equipment and transportation necessary for the proper execution of The Work unless specifically noted otherwise. The Contractor shall do all The Work shown on the Plans and described in the Specifications and all incidental work considered necessary to complete the project in a substantial and acceptable manner, and to fully complete the work or improvement, ready for use, occupancy and operation by the Owner.

204.02 CONFLICT

If there be conflicting variance between the Plans and the Specifications, the provisions of the Specifications shall control. In case of conflict between the General Conditions of the Contract, or any modifications thereof, and the Detailed Technical Specification Requirements, the Detailed Specification Requirements shall control.

Where a standard American Society for Testing Materials, American Concrete Institute, American Standards Association, American Water Works Association, or other agency designation is specified for a material, that designation shall be the current revision, either tentative or adopted. If a referenced specification is in disagreement with these specifications, the City of Shawnee specifications shall govern.

204.03 DISCREPANCIES IN PLANS

Any discrepancies found between the Plans and Specifications and site conditions or any errors or omissions in the Plans or Specifications shall be immediately reported to the Engineer, who shall promptly correct such error or omission in writing. Any Work done by the Contractor after his discovery of such discrepancies, errors, or omissions shall be done at the Contractor's own risk.

204.04 ADEQUACY OF PLANS AND SPECIFICATIONS

Responsibility for adequacy of the design and for sufficiency of the Drawings and Specifications shall be borne by the Owner. The complete requirements of The Work to be performed under the Contract shall be set forth in Plans and Specifications to be supplied by the Owner through the Engineer or by the Engineer as representative of the Owner. Plans and Specifications furnished shall be in accordance with the Contract Documents and shall be true and accurate developments thereof.

The Plans show the location of certain existing surface and subsurface structures. The Owner assumes no responsibility for failure to show any or all structures on the Plans, or to show them in their exact location. It is mutually agreed such failure will not be considered sufficient basis for claims for extra work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate substantial changes in the lines or grades or requires the building of a special structure, provision for which is not made in the Plans, in which case the provisions in these Specifications for "Extra Work" will apply.

The cost of adjusting water mains or services to grade shall be included in the prices Bid for other items of work, except where a specific item for this work is included in the Proposal.

Contractor shall be responsible for locating existing utilities, underground installations, and structures in the vicinity of construction prior to any Work being done. All conflicts should be reported to the Engineer. Any work done in the area of a conflict without the Engineer's knowledge shall be at the Contractor's own risk.

204.05 ADDITIONAL INSTRUCTIONS

Further instructions may be issued by the Engineer during the progress of The Work by means of Drawings or otherwise to make more clear or specific the Plans and Specifications, or as may be necessary to explain or illustrate changes in The Work to be done.

204.06 COPIES OF DRAWINGS AND SPECIFICATIONS FURNISHED

Except as provided for otherwise, all required copies of Plans and Specifications necessary for the execution of The Work shall be furnished to the Contractor without charge.

One complete set of all Plans and Specifications shall be maintained at the job site and shall be available to the Engineer at all times.

All original or duplicated Plans and Specifications and other data prepared by the Engineer shall remain the property of the Engineer, and they shall not be re-used on other work, but shall be returned to him upon completion of The Work.

204.07 DIMENSIONS

Figured dimensions on the Plans will be used in preference to scaling the Plans. Where The Work of the Contractor is affected by finish dimensions, these shall be determined by the Contractor at the site, and he shall assume the responsibility therefore.

204.08 SAMPLES

All samples called for in the Specifications or required by the Engineer shall be furnished by the Contractor and shall be submitted to the Engineer for his approval. Samples shall be furnished so as not to delay fabrication, allowing the Engineer reasonable time for the consideration of the samples submitted.

The Contractor shall furnish such samples of material as may be required for examination and test. All materials and workmanship shall be in accordance with approved samples. All samples of materials for tests shall be taken according to methods provided in the Specifications.

204.09 SHOP DRAWINGS

The Contractor shall provide show drawings, settings, schedules and such other drawings as may be necessary for the prosecution of The Work in the shop and in the field as required by the Plans, Specifications or Engineer's instructions. Deviations from the Plans and Specifications shall be called to the attention of the Engineer at the time of the first submission of shop drawings and other drawings for approval. The Engineer's approval of any drawings shall not release the Contractor from responsibility for such deviations. Shop drawings shall be submitted according to the following schedule:

A. Four (4) copies shall be submitted at least thirty (30) days before the materials indicated thereon are to be needed, or earlier if required to prevent delay of The Work.

B. The Engineer shall, within fourteen (14) days of the submittal of any shop drawings, return one copy to the Contractor marked with all corrections and changes.

C. The Contractor shall then correct the shop drawings to conform to the corrections and changes requested by the Engineer.

D. Following completion of such corrections and changes, the Contractor shall furnish the Engineer three (3) copies of the shop drawings conforming to the required corrections and changes.

204.10 "OR EQUAL" CLAUSE

Whenever a material or article required is specified or shown on the Plans by using the name of the proprietary product or of a particular manufacturer or vendor, any material or article which will perform adequately the duties imposed by the general design will be considered equal and satisfactory providing the material or article so proposed is of equal substance and function in the Architect/Engineer's opinion. It shall not be purchased or installed without the Engineer's written approval.

204.11 SUBMITTALS

The Contractor shall furnish four copy's of complete catalog data for every manufactured item of equipment and all components to be used in The Work, including specific performance data, material description, rating, capacity, working pressure, material gage or thickness, brand name, catalog number and general type as appropriate:

A. This submission shall be compiled by the Contractor and approved by the Engineer before any of the equipment is ordered.

B. After written approval, this submission shall become a part of the Contract, and may not be deviated from except upon written approval of the Engineer.

C. Catalog data for equipment approved by the Engineer does not in any case supersede the Engineer's Contract Documents. The approval of the Engineer shall not relieve the Contractor from responsibility for deviations from Plans or Specifications, nor shall it relieve him from responsibility for errors of any sort in the items submitted. The Contractor shall check The Work described by the catalog data with the Engineer's Contract Documents for deviations and errors.

D. It shall be the responsibility of the Contractor to ensure that items to be furnished fit the space available. He shall make necessary field measurements to ascertain space requirements, including those for connections, and shall order such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the Plans and Specifications.

E. Where equipment requiring different arrangement of connections from those shown is approved, it shall be the responsibility of the Contractor to install the equipment to operate properly, and in harmony with the intent of the Drawings and Specifications, and to make all changes in The Work required by the different arrangements of connections.

204.12 SURVEYS

Unless otherwise specified, the Owner shall establish all base lines for the location of the principal component parts of The Work together with a suitable number of bench marks adjacent to The Work. Based upon the information provided by the Owner, the Contractor shall develop and make all detail surveys necessary for construction, including slope stakes, batter boards, stakes for pile locations and other working points, lines and elevations. The Contractor shall have the responsibility to carefully preserve bench marks, reference points and stakes, and, in the case of destruction thereof by the Contractor or resulting from his negligence the Contractor shall be charged with the expense and damage resulting therefrom and shall be responsible for any mistakes that may be caused by the unnecessary loss or disturbance of such bench marks, reference points and stakes.

The Contractor shall provide an experienced instrument man, competent assistants, and such instruments, tools, stakes, and other materials as required to complete the survey, layout, measurement work. In addition, the

Contractor shall furnish, without charge, competent men from his force and such tools, stakes, and other materials as the Engineer may require in establishing or designating control points or in checking survey, layout, and measurement work performed by the Contractor.

The Contractor shall keep the Engineer informed, a reasonable time in advance, of the times and places at which he wishes to do work, so that horizontal and vertical control points may be established and any checking deemed necessary by Engineer may be done with minimum inconvenience to the Engineer and minimum delay to the Contractor.

204.13 SPECIAL CONDITIONS

Should any work or any conditions which are not thoroughly or satisfactorily stipulated or covered by the general or standard specifications be anticipated on any proposed work, "Special Conditions" for such work may be prepared and shall be considered as a part of the Specifications and Contract.

204. 14 INCREASED OR DECREASED QUANTITIES OF WORK

The Owner reserves the right to alter the quantities of The Work to be performed or to extend or shorten the improvement at any time when and as found necessary, and the Contractor shall perform The Work as altered, increased or decreased, at the Contract unit prices. No allowance will be made for any change in anticipated profits nor shall such changes be considered as waiving or invalidating any condition or provisions of the Contract.

204.15 ALTERATIONS OF PLANS AND SPECIFICATIONS

The Owner reserves the right to make such changes in the Plans and in the character of The Work as may be necessary or desirable to insure completion of The Work in the most satisfactory manner, provided such changes do not materially alter the original Plans and Specifications or change the general nature of The Work as a whole. Such changes shall not be considered as waiving or invalidating any condition or provision of the Contract.

SECTION 205 - ENGINEER - OWNER - CONTRACTOR RELATIONS

205.01 ENGINEER'S RESPONSIBILITY AND AUTHORITY

All Work shall be done under the general engineering supervision of the Engineer to his satisfaction.

The Engineer shall decide all questions which arise as to the quality and acceptability of materials furnished, Work performed, manner of performance, rate of progress of The Work, interpretation of the Plans and Specifications, acceptable fulfillment of the Contract, compensation, mutual rights between Contractors under these Specifications and suspension of Work. The Engineer shall have the right to establish any sequence or priority of operation in the interest of desirable cooperation with other work. He shall determine the amount and quality of Work performed and materials furnished and his decisions and estimates shall be final. His estimate in such event shall be a condition precedent to the right of the Contractor to receive money due him under the Contract.

The authority of the Engineer shall to be construed to include the authority to waive, revise or modify Specifications, as herein set forth, either as to kind, type or quality of materials or manner or quality of construction.

205.02 SUSPENSION OF WORK

The Engineer shall have the authority to suspend The Work, wholly or in part, for such period or periods, based on his judgment, as he may deem necessary. Reasons for such suspension shall be given to the Contractor or his superintendent and can include, but shall not be restricted to, inclement weather, non-compliance with Plans or Specifications, improper or insufficient safety precautions, or improper sequencing of Work.

205.03 INSPECTION OF WORK

All materials and each part or detail of The Work shall be subject at all times to inspection by the Engineer, and the Contractor will be held strictly to the true intent of the Specifications in regard to quality of materials, workmanship, and the diligent execution of the Contract. Such inspection may include mill, plant or shop inspection, and any material furnished under these Specifications is subject to such inspection. The Engineer shall be allowed access to all parts of The Work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

205.04 EXAMINATION OF COMPLETED WORK

At the Engineer's request, the Contractor, at any time before acceptance of The Work, shall remove or uncover such portions of the finished Work as may be directed. After examination, the Contractor shall restore said portions of The Work to the standard required by the Specifications. Should The Work thus exposed or examined prove acceptable, the uncovering or removing, and the replacing of the covering or making good of the parts removed shall be paid for as Extra Work, but should The Work so exposed or examined prove unacceptable, the uncovering, removing and replacing shall be at the Contractor's expense.

205.05 CONTRACTOR'S SUPERINTENDENT

A qualified superintendent, who is acceptable to the Engineer, shall be maintained on The Work and give efficient supervision to The Work until its completion. The superintendent shall have full authority to act in behalf of the Contractor, and all directions given to the superintendent shall be considered given to the Contractor. In general, the Engineer's instructions shall be confirmed in writing and always upon written request from the Contractor.

205.06 LANDS BY OWNER

The Owner shall provide the lands shown on the Plans upon which The Work under the Contract is to be performed and to be used for right-of-way for access. Any delay in furnishing these lands by the Owner shall be deemed proper clause for adjustment in the time of completion.

205.07 LANDS BY CONTRACTOR

Any additional land and access thereto not shown on the Plans that may be required for temporary construction facilities or for storage of materials shall be provided by the Contractor with no liability to the Owner. The Contractor shall confine his apparatus and storage of materials and operation of his workmen to those areas described in the Plans and Specifications and such additional areas which he may provide as approved by the Engineer.

205.08 PRIVATE PROPERTY

The Contractor shall not enter upon private property for any purpose without obtaining permission, and he shall be responsible for the preservation of all public property, trees, monuments, etc. along and adjacent to the street and/or right-of-way, and shall use every precaution necessary to prevent damage or injury thereto. He shall use suitable precautions to prevent damage to pipes, conduits and other underground structures, and shall protect carefully from disturbance or damage all monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed.

205.09 ASSIGNMENT OF CONTRACT

Neither the Contractor nor the Owner shall sublet, sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

205.10 REMOVAL OF CONSTRUCTION EQUIPMENT, TOOLS AND SUPPLIES

At the termination of this Contract, before acceptance of The Work by the Engineer, the Contractor shall remove all of his equipment, tools and supplies from the property of the Owner. Should the Contractor fail to remove such equipment, tools, and supplies, the Owner shall have the right to remove them at the Contractor's expense.

205.11 SUSPENSION OF WORK BY OWNER FOR CAUSE

The Work or any portion thereof may be suspended at any time by the Owner for good and valid cause provided that he gives the Contractor five (5) days written notice of suspension, which shall set forth the date on which Work is to be resumed. The Contractor shall resume The Work upon written notice from the Owner and within ten (10) days after the date set forth in the notice of suspension. If the Owner does not give written notice to resume Work within ten (10) days of the date fixed in the notice of suspension, the Contractor may abandon that portion of The Work so suspended and shall be entitled to payment in accordance with Section 209.10.

205.12 OWNER'S RIGHT TO CORRECT DEFICIENCIES

Upon failure of the Contractor to perform The Work in accordance with the Contract Documents, including any requirements with respect to the Schedule of Completion, and after five (5) days written notice to the Contractor, and receipt of written approval from the Engineer, the Owner may, without prejudice to any other remedy he may have, correct such deficiencies.

205.13. OWNER'S RIGHT TO TERMINATE CONTRACT AND COMPLETE THE WORK

The Owner shall have the right to terminate the employment of the Contractor after giving ten (10) days written notice of termination to the Contractor in the event of any default by the Contractor. In the event of such termination, the Owner may take possession of The Work and all materials, tools and equipment thereon and may finish The Work by whatever method and means he may select. It shall be considered a default by the Contractor whenever he shall:

A. Declare bankruptcy, become insolvent or assign his assets for the benefit of his creditors.

B. Disregard or violate important provisions of the Contract Documents or Engineer's instructions, or fail to prosecute The Work according to the agreed schedule of completion, including extensions thereof.

C. Fail to provide a qualified superintendent, competent workmen or subcontractors, or proper materials, or fail to make prompt payment therefore.

205.14 SEPARATE CONTRACTS

The Owner may let other Contracts in connection with The Work of the Contractor. The Contractor shall cooperate with other Contractors with regard to storage of materials and execution of their Work. It shall be the Contractor's responsibility to inspect all Work by other Contractors affecting his Work and to report to the Engineer any irregularities which will not permit him to complete his Work in a satisfactory manner. His failure to notify the Engineer of such irregularities shall indicate the Work of other Contractors has been satisfactorily completed to receive his Work. The Contractor shall not be responsible for defects of which he could not have known, which develop in the work of others after the work is completed. It shall be the responsibility of the Contractor to measure the completed Work in place and report to the Engineer immediately any difference between contemplated Work by others and the Plans.

205.15 SUBCONTRACTS

At the time specified by the Contract Documents or when requested by the Engineer, the Contractor shall submit in writing to the Owner for approval of the Engineer the names of the subcontractors proposed for The Work. Sub-contractors may not be changed except at the request or with the approval of the Engineer. The Contractor

is responsible to the Owner for the acts and omissions of his subcontractors, and of their direct and indirect employees, to the same extent as he is responsible for the acts and omissions of his employees. The Contract Documents shall not be construed as creating any contractual relation between any subcontractor and the Owner. The Contractor shall bind every subcontractor by the terms of the Contract Documents.

For convenience of reference and to facilitate the letting of contracts and subcontracts, the Specifications are separated into titled sections. Such separations shall not, however, operate to make the Engineer an arbiter to establish limits to the contracts between Contractor and subcontractors.

205.16 WORK DURING AN EMERGENCY

The Contractor shall perform any Work and shall furnish and install any materials and equipment necessary during an emergency endangering life or property. In all cases he shall notify the Engineer of the emergency and its nature as soon as practicable and he shall proceed to properly protect both life and property.

205.17 ORAL AGREEMENTS

No oral order, objection, claim or notice by any party to the others shall affect or modify any of the terms or obligations contained in any of the Contract Documents, and none of the provisions of the Contract Documents shall be held to be waived or modified by reason of any act whatsoever, other than by a definitely agreed waiver or modification thereof in writing, and no evidence shall be introduced in any proceeding of any other waiver or modification.

SECTION 206 - MATERIALS AND WORKMANSHIP

206.01 MATERIALS FURNISHED BY THE CONTRACTOR

All materials used in The Work shall meet the requirements of the respective Specifications, and no material shall be used until it has been approved by the Engineer. All materials not otherwise specifically indicated shall be furnished by the Contractor. Other materials shall be immediately removed from the job site at the request of the Engineer.

All materials furnished by the Contractor shall be manufactured within the United States and shall be new and unused, unless otherwise specified or approved in writing by the Engineer.

206.02 MATERIALS FURNISHED BY THE OWNER

Materials specifically indicated shall be furnished by the Owner. The fact that the Owner is to furnish material is conclusive evidence of its acceptability for the purpose intended, and the Contractor may continue to use it until otherwise directed. If the Contractor discovers any defect in material furnished by the Owner, he shall notify the Engineer. Unless otherwise noted or specifically stated, materials furnished by the Owner, which are not of local occurrence, are considered to be f.o.b. the nearest railroad station. The Contractor shall be prepared to unload and properly protect all such material from damage or loss. The Contractor shall be responsible for material loss or damage after receipt of material at the point of delivery.

206.03 STORAGE OF MATERIALS

Materials shall be so stored as to insure the preservation of their quality and fitness for The Work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces, and not on the ground, and/or they shall be placed under cover. Stored materials shall be located so as to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the Owner or Lessor.

206.04 CHARACTER OF WORKMEN

The Contractor shall at all times be responsible for the conduct and discipline of his employees and/or any subcontractor or persons employed by subcontractors. All workmen must have sufficient knowledge, skill and experience to perform properly the work assigned to them. Any foreman or workman employed by the Contractor or subcontractor who, in the opinion of the Engineer, does not perform his Work in a skillful manner, or appears to be incompetent or to act in a disorderly or intemperate manner shall, at the written request of the Engineer, be discharged immediately and shall not be employed again in any portion of The Work without the approval of the Engineer.

206.05 REJECTED WORK AND MATERIALS

All materials which do not conform to the requirements of the Contract Documents, are not equal to samples approved by the Engineer, or are in any way unsatisfactory or unsuited to the purpose for which they are intended, shall be rejected. Any defective Work whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause, shall be removed within ten (10) days after written notice is given by the Engineer, and The Work shall be re-executed by the Contractor. The fact that the Engineer may have previously overlooked such defective Work shall not constitute an acceptance of any part of it.

Should the Contractor fail to remove rejected Work or materials within ten (10) days after written notice to do so, the Owner may remove them and may store the materials and the cost of such removal to be taken out of the money that may be due or may become due the Contractor on account of or by virtue of this Contract

Correction of faulty Work after final payment shall be in accordance with the requirements of Section 209.17.

206.06 MANUFACTURER'S DIRECTIONS

Manufactured articles, material and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer unless herein specified to the contrary.

206.07 CUTTING AND PATCHING

The Contractor shall do all necessary cutting and patching of The Work that may be required to properly receive The Work of the various trades or as required by the Plans and Specifications to complete the structure. He shall restore all such cut or patched work as directed by the Engineer. Cutting of existing structure that shall endanger The Work, adjacent property, workmen or the public shall not be done unless approved by the Engineer and under his direction.

206.08 CLEANING UP

The Contractor shall remove from the Owner's property, and from all public and private property, all temporary structures, rubbish and waste materials resulting from his operation or caused by his employees, and shall remove all surplus materials leaving the site smooth, clean and true to line and grade.

206.09 GUARANTY PERIOD

The Contractor shall warrant all equipment furnished and Work performed by him for a period of two (2) years from the date of written acceptance or beneficial occupancy of The Work, whichever is earlier.

206.10 SALVAGEABLE MATERIALS

All materials which are salvageable, as determined by the Engineer and/or Owner, shall remain the property of the Owner. Those materials deemed to be unsalvageable shall be properly disposed of by the Contractor.

SECTION 207 - INSURANCE, LEGAL RESPONSIBILITY AND PUBLIC SAFETY

207.01 INSURANCE

The Contractor shall secure and maintain such insurance from an insurance company authorized to write casualty insurance in the State where The Work is located as will protect himself, his subcontractors and the Owner from claims for bodily injury, death or property damage which may arise from operations under this Contract. The Contractor shall not commence Work under this Contract until he has obtained all insurance required under this paragraph and shall have filed the certificate of insurance or the certified copy of the insurance policy with the Owner. Each insurance policy shall contain a clause providing that it shall not be cancelled by the insurance company without ten (10) days written notice to the Owner of intention to cancel. The amounts of such insurance shall not be less than the following:

A. Workmen's Compensation and Employer's Liability Insurance
shall be secured and maintained as required by the State where The Work is located.

B. Public Liability, Bodily Injury and Property Damage:

1.	Personal Injury, each person	$ 100,000
2.	Personal Injury, each accident	$ 1,000,000
3.	Property Damage, each occurrence	$ 100,000

C. Automobile and Truck Public Liability, Bodily Injury and Property Damage:

1.	Personal Injury, each person	$ 100,000
2.	Personal Injury, each accident	$ 1,000,000
3.	Property Damage, each accident	$ 100,000

207.02 INDEMNITY

The Contractor shall indemnify and save harmless the Owner from and against all losses and all claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against him by reason of any omission or act of the Contractor, his agents or employees in the execution of The Work or in the guarding of it. The Contractor shall obtain in the name of the Owner and shall maintain and pay the premiums for such insurance in such amount and with such provisions as will protect the Owner from contingent liability under this Contract and a copy of such insurance policy or policies shall be delivered to the Owner. Full compliance by the Owner with the terms and provisions of such insurance policy or policies shall be a condition precedent to the Owner's right to enforce against the Contractor any provisions of this article.

207.03 OTHER INSURANCE

In addition to such other insurance as the Contractor elects to carry for his own protection and the insurance requirements of 207.01, he shall secure and maintain in the name of the Owner policies upon such structures and material and in such amounts as shall be designated in the Special Conditions, if applicable. The policies shall be secured from a company which is satisfactory to the Owner and delivered to the Owner.

207.04 PATENTS AND ROYALTIES

If any design, device, material or process covered by letters, patent or copy right is used by the Contractor, he shall provide for such use by legal agreement with the owner of the patent or a duly authorized licensee of such owner, and shall save harmless the Owner from any and all loss or expense on account thereof, including its use by the Owner.

207.05 PERMITS

All permits and licenses necessary for the prosecution of The Work not furnished by the Owner or Engineer shall be secured by the Contractor. All permit fees will be waived by the City of Shawnee for this project.

207.06 LAWS TO BE OBSERVED

The Contractor shall give all notices and comply with all Federal, State and local laws, ordinances and regulations in any manner affecting the conduct of The Work, and all such orders and decrees as exist, or may be enacted by bodies or tribunals having any jurisdiction or authority over The Work, and shall indemnify and save harmless the Owner against any claim or liability arising from, or based on, the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees.

207.07 WARNING SIGNS AND BARRICADES

The Contractor shall provide adequate signs, barricades, red lights and watchmen and take all necessary precautions for the protection of The Work and the safety of the public. All barricades and obstructions shall be protected at night by red signal lights which shall be kept burning from sunset to sunrise. Barricades shall be of substantial construction and shall be painted white or whitewashed to increase their visibility at night. Suitable warning signs shall be so placed and illuminated at night as to show in advance where construction, barricade or detours exist.

207.08 PUBLIC SAFETY AND CONVENIENCE

Danger Signals and Protection: When the Contractor is performing any type of construction or excavation work, or is stockpiling or storing any materials or equipment upon or adjacent to any street, alley, sidewalk, residence, public ground, or other location that is likely to be subject to pedestrian or vehicular traffic, he shall furnish, erect, and maintain substantial guard rails, safety fencing, lights, and traffic control devices around the project to protect pedestrians, animals, and vehicles from injury or damage. All traffic control shall be in accordance with the Oklahoma Department of Transportation Standards and Procedures for Street Use and Temporary Traffic Control. Safety and traffic control devices shall be installed and removed only at the direction of the Engineer. The Contractor shall provide sufficient proper signals and flagmen for warning during blasting operations.

Interference with Traffic: The Contractor shall construct and maintain adequate and safe bridges or crosswalks over excavations, where required. When a roadway or sidewalk is not closed, the Contractor shall provide a safe substitute route for any portion obstructed by his operations. If a roadway or sidewalk is closed to traffic, the Contractor shall provide and make detours. As directed by the Engineer, construction across roadways or sidewalks may be done by open excavation.

Excavations: The Contractor shall adequately shore, or sheet, and brace the excavation, or shall slope the sides of the trench in accordance with the State of Oklahoma Department of Labor requirements.

The Contractor shall at all times so conduct his work as to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of The Work, and to insure the protection of persons and property in a manner satisfactory to the Engineer. No road or street shall be closed to the public except with the permission of the Engineer and proper governmental authority. Fire hydrants on or adjacent to the work shall be kept accessible to firefighting equipment at all times. Temporary provisions shall be made by the Contractor to ensure the use of sidewalks and the proper functioning of all gutters, sewer inlets, drainage ditches, and irrigation ditches, which shall not be obstructed except as approved by the Engineer.

207.09 CROSSING UTILITIES

Pipelines and other existing underground installations and structures in the vicinity of the work to be done hereunder are indicated on the drawings according to information available to the Engineer; however, all lines actually existing may not be shown. The Contractor shall make every effort to locate all underground pipelines, conduits, and structures by contacting owners of underground utilities and by prospecting in advance of trench excavation.

When new construction crosses highways, streets or utilities under the jurisdiction of State, County, City or other public agency, public utility or private entity, written permission from the proper authority shall be secured before executing such new construction. A copy of this written permission must be filed with the Owner before any work is done. The contractor will be required to furnish a release from the proper authority before final acceptance of The Work.

When The Work encroaches upon the right-of-way of any railway, the Owner will secure for the Contractor, all the necessary contracts, easements or authority to enter upon such right-of-way for the prosecution and completion of The Work. All construction shall be in strict accord with the pertinent provisions of the railway authority. The Contractor shall take such special precautions for the safety of The Work and the travelling public as may be necessary by sheeting, bracing and thoroughly supporting the sides of any excavation and supporting and protecting any adjacent structures, so as not to interfere with the operation of the railroad.

207.10 SANITARY PROVISION

The Contractor shall provide and maintain such sanitary accommodations for the use of his employees and those of his subcontractors as may be necessary to comply with the requirements and regulations of the local and State departments of health and as directed by the Engineer.

207.11 USE OF EXPLOSIVES

No Explosives are to be allowed on this project without gaining approval from City of Shawnee

207.12 PUBLIC UTILITIES AND PUBLIC PROPERTY TO BE CHANGED

In case it is necessary to change or move the property of any owner of a public utility, such owner will, upon proper application by the Contractor, be notified by the Engineer to change or move such property within a specified time, and the Contractor shall not interfere with such property until ordered to do so by the Engineer. The right is reserved to the Owner of public utilities to enter upon the limits of the Contract for the purpose of making such repairs or changes of their property that may be necessary by performance of the Contract. The municipality in which the performance of the Contract is to be executed shall have the privilege of entering upon the limits of the Contract for the purpose of repairing or relaying sewer and water lines and appurtenances, repairing culverts or storm drains, and for making other repairs, changes or extensions to any property owned by the municipality.

207.13 TEMPORARY SEWER AND DRAIN CONNECTIONS

When existing sewers have to be taken up or removed, the Contractor, at his own expense, shall provide and maintain temporary outlets and connections for all private or public drains, sewers or sewer inlets. He shall also take care of all sewage and drainage which will be received from these drains, sewers and sewer inlets; and for this purpose he shall provide and maintain at his own expense adequate pumping facilities and temporary outlets or diversions. He shall construct such troughs, pipes or other structures necessary and be prepared at all times to dispose of drainage and sewage received from these temporary connections until such time as the permanent connections are built and in service. The sewers and connections shall be kept in service and maintained under the contract save where specified or ordered to be abandoned by the Engineer.

All water and sewage shall be disposed of in a satisfactory manner so that nuisance is created and that The Work under construction will be adequately protected.

207.14 ARRANGEMENT AND CHARGE FOR WATER FURNISHED BY A MUNICIPALITY

If the Contractor desires to use municipal water he shall pay the rate established by Municipal Ordinances for such service and he shall make complete and satisfactory arrangements with the Municipal Water Department for so doing. Meters will be used and the Contractor shall deposit the cost of the water meter with the Water Department and will pay for all repairs and maintenance of the meter for the period which he has the meter in use or in his possession.

207.15 USE OF FIRE HYDRANTS

The Contractor or his employees shall not open, turn off, interfere with, attach pipe or hose to or connect anything with any fire hydrant, stop valve or stop cock or tap any water main belonging to the municipality, unless duly authorized to do so by the municipality.

SECTION 208 - PROGRESS AND COMPLETION OF WORK

208.01 NOTICE TO PROCEED

Following the execution of the Contract by the Owner, written Notice to Proceed with The Work shall be given to the Contractor. The Contractor shall begin and shall prosecute The Work regularly and uninterruptedly thereafter (unless otherwise directed in writing by the Owner) with such force as to secure the completion of The Work within the time stated in the Proposal.

208.02 CONTRACT TIME

The Contractor shall complete, in an acceptable manner, all of The Work Contracted for in the time stated in the Proposal. Computation of Contract time shall commence on the date specified on the Notice to Proceed. If no date is specified, Contract time shall commence on the tenth (10th) day following the date of mailing, by regular mail, of the Notice to Proceed. Every calendar day following, except as herein provided, shall be counted as a working day.

208.03 SCHEDULE OF COMPLETION

The Contractor shall submit, at such times as may reasonably be requested by the Engineer, schedules which shall show the order in which the Contractor proposes to carry on The Work, with dates at which the Contractor will start the several parts of The Work, and estimated dates of completion of the several parts.

208.04 CHANGES IN THE WORK

The Owner may, as the need arises, order changes in The Work through additions, deletions or modifications without invalidating the Contract. Compensation and time of completion affected by the change shall be adjusted at the time of ordering such change.

208.05 EXTRA WORK

New and unforeseen items of work found to be necessary and which cannot be covered by any item or combination of items for which there is a Contract price shall be classed as Extra Work. The Contractor shall do such Extra Work and furnish such materials as may be required for the proper completion for construction of the whole Work contemplated upon written order from the Owner as approved by the Engineer. In the absence of such written order, no claim for Extra Work shall be considered. Extra Work shall be performed in accordance with these Specifications where applicable and work not covered by the Specifications or Special Conditions shall be done in accordance with the best practice as approved by the Engineer. Extra Work required in an emergency to protect life and property shall be performed by the Contractor as required.

208.06 EXTENSION OF CONTRACT TIME

A delay beyond the Contractor's control occasioned by an Act of God, or act or omission on the part of the Owner, or by strikes, lockouts, fire, etc., may entitle the Contractor to an extension of time on which to complete The Work as determined by the Engineer, provided, however, that the Contractor shall immediately give written notice to the Engineer of the cause of such delay.

208.07 FAILURE TO COMPLETE WORK ON TIME

The time of completion is the essence of the Contract. For each working day that any Work shall remain uncompleted after the time agreed upon in the Proposal and the Contract, or as automatically increased by additional Work or materials ordered after the Contract is signed, or the increased time granted by the Owner for the completion of said Work, the sum per day given in the following schedule, unless otherwise specified in the Proposal or Special Conditions, will be deducted from the monies due the Contractor, not as a penalty but as liquidated damages:

Amount of Contract	Amount of Liquidated Damages per Day
Less than $25,000.00	50.00
$25,000.00 and less than $50,000.00.	100.00
$50,000.00 and less than $100,000.00	200.00
$100,000.00 and less than $250,000.00.	300.00
$250,000.00 and less than $500,000.00.	400.00
$500,000.00 and less than $1,000,000.00.	500.00
Over $1,000,000.00	1,000.00

The sum of money thus deducted for such delay, failure or non-completion is not to be considered as a penalty, but should be deemed taken and treated as reasonable liquidated damages since it would be impracticable and extremely difficult to fix the actual damages.

208.08 USE OF A SECTION OR PORTION OF THE WORK

Whenever, at the request of the Owner and in the opinion of the Engineer, any portion of The Work has advanced sufficiently, it may be put into use by the Owner through the written order of the Engineer. This beneficial occupancy by the Owner will be permitted only after receipt of written notice of release by the Contractor's Surety and Insurance carrier. The Guaranty Period, as defined elsewhere in these Specifications, for all Work covered by the Engineer's written order shall commence at the start of beneficial occupancy by the Owner.

SECTION 209 - MEASUREMENT AND PAYMENT

209.01 DETAILED BREAKDOWN OF CONTRACT AMOUNT

Except in cases where unit prices form the basis for payment under the Contract, the Contractor shall within ten (10) days of receipt of Notice to Proceed, submit a complete breakdown of the Contract Amount showing the value assigned to each part of The Work, including an allowance for profit and overhead. Upon approval of the breakdown of the Contract Amount by the Engineer, it shall be used as the basis for all Requests for Payment.

209.02 REQUESTS FOR PAYMENT

The Contractor may submit periodically but not more than once each month a Request for Payment for work done and materials delivered and stored on the site. The Contractor shall furnish the Engineer all reasonable facilities required for obtaining the necessary information relative to the progress and execution of The Work. Payment for materials stored on the site will be conditioned upon evidence submitted to establish the Owner's title to such materials. Each Request for Payment shall be computed from the work completed on all items listed in the Detailed Breakdown of Contract Amount, less ten percent (10%) to be retained until final completion and acceptance of The Work, and less previous payments, provided that any time after fifty percent (50%) of the work has been satisfactorily completed, the Owner may reduce the percentage retainage. Where unit prices are specified, the Request for Payment shall be based on the quantities completed.

209.03 ENGINEER'S ACTION ON A REQUEST FOR PAYMENT

Within ten (10) days of submission of any Request for Payment by the Contractor the Engineer shall:

A. Approve the Request for Payment, as submitted.

B. Approve such other amount as he shall decide is due the Contractor, informing the Contractor in writing of his reasons for approving the amended amount.

C. Withhold the Request for Payment, informing the Contractor in writing of his reasons for withholding it.

209.04 OWNER'S ACTION ON AN APPROVED REQUEST FOR PAYMENT

Within thirty (30) days from the date of approval of a Request for Payment by the Engineer, the Owner shall:

A. Pay the Request for Payment as approved.

B. Pay such other amount in accordance as herein provided as he shall decide is due the Contractor, informing the Contractor and the Engineer in writing of his reasons for paying the amended amount.

C. Withhold payment in accordance as herein provided informing the Contractor and the Engineer of his reasons for withholding payment.

209.05 OWNER'S RIGHT TO WITHHOLD PAYMENT OF AN APPROVED REQUEST FOR PAYMENT

The Owner may withhold payment in whole or in part on an approved Request for Payment to the extent necessary to protect himself from loss on account of any of the following causes discovered subsequent to approval of a Request for Payment by the Engineer:

A. Defective work.

B. Evidence indicating the probable filing of claims by other parties against the Contractor.

C. Failure of the Contractor to make payments to subcontractors, material suppliers or labor.

D. Damage to another contractor.

209.06 RESPONSIBILITY OF THE CONTRACTOR

Unless specifically noted otherwise, the Contractor shall furnish all materials and services, and perform all The Work described by the Contract Documents or shall have all materials and services furnished and all The Work performed at his expense. It shall also be the Contractor's responsibility to pay for:

A. Replacement of survey bench marks, reference points and stakes provided by the Owner under Section 204.12.

B. Lands by Contractor provided in accordance with Section 205.07.

C. Insurance obtained in accordance with Sections 207.01 and 207.02.

D. Other insurance obtained in accordance with Section 207.03.

E. Performance Payment Bond obtained in accordance with Section 203.04.

F. Statutory Bond obtained in accordance with Section 203.04.

G. Maintenance Bond obtained in accordance with Section 203.04.

H. Royalties required under Section 207.04.

I. Permits and licenses required of the Contractor and all subcontractors.

209.07 PAYMENT FOR UNCORRECTED WORK

If, in the opinion of the Engineer, it is undesirable to replace any defective or damaged material or to reconstruct or correct any portion of The Work injured or not performed in accordance with the Contract Documents, the compensation to be paid the Contractor hereunder shall be reduced by such amount as in the judgment of the Architect/Engineer shall be equitable.

209.08 PAYMENT FOR REJECTED WORK AND MATERIALS

The removal of work and materials rejected under Section 206.05 and the re-execution of acceptable work by the Contractor shall be at the expense of the Contractor, and he shall pay the cost of replacing The Work of other contractors destroyed or damaged by the removal of the rejected work or materials and the subsequent replacement of acceptable work.

Removal of rejected Work or materials and storage of materials by the Owner shall be paid by the Contractor within thirty (30) days after written notice to pay is given by the Owner. If the Contractor does not pay the expenses of such removal and after ten (10) days written notice being given by the Owner of his intent to sell the materials, the Owner may sell the materials at auction or at private sale, and shall pay to the Contractor the net proceeds therefrom after deducting all the costs and expenses that should have been borne by the Contractor.

209.09 PAYMENTS FOR EXTRA WORK

Written notice of claims for payments for Extra Work shall be given by the Contractor within ten (10) days after receipt of instructions from the Owner as approved by the Engineer to proceed with the Extra Work, and also before any work is commenced, except in emergency endangering life or property. No claim shall be valid unless so made. In all cases, the Contractor's itemized estimate sheets showing all labor and material shall be submitted to the Engineer. The Owner's order for Extra Work shall specify any extension of the Contract time and one of the following methods of payment:

A. Unit prices or combinations of unit prices which formed the basis of the original Contract.

B. A lump sum based on the Contractor's estimate, accepted by the Owner, and approved by the Engineer.

C. Actual cost-plus fifteen percent (15%) for overhead and profit.

209.10 PAYMENT FOR WORK SUSPENDED BY THE OWNER

If The Work or any part thereof shall be suspended by the Owner and abandoned by the Contractor, as provided in Section 205.11, the Contractor will then be entitled to payment for all work done on the portions so abandoned, plus fifteen percent (15%) of the value of the abandoned work to compensate for overhead, plant expense and anticipated profit.

209.11 PAYMENT FOR WORK BY THE OWNER

The cost of The Work performed by the Owner in removing construction equipment, tools and supplies in accordance with Section 205.10 and in correcting deficiencies in accordance with Section 205.12 shall be paid by the Contractor.

209.12 PAYMENT FOR WORK BY THE OWNER FOLLOWING HIS TERMINATION OF THE CONTRACT

Upon termination of the Contract by the Owner in accordance with Section 205.13, no further payments shall be due the Contractor until The Work is completed. If the unpaid balance of the Contract Amount shall exceed the cost of completing the work including all overhead costs, the excess shall be paid to the Contractor. If the cost of completing the work shall exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The cost incurred by the Owner, as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Owner and approved by the Engineer.

209.13 PAYMENT FOR SAMPLES AND TESTING OF MATERIALS

Samples furnished in accordance with Section 204.08 shall be furnished by the Contractor at his expense.

Testing of samples and materials furnished in accordance with Section 204.08 shall be arranged and paid for by the Owner. Contractor shall assist as required, in the performance of tests.

Re-testing required by the failure of the original tests not meeting the Specifications will be paid for by the Contractor.

209.14 RELEASE OF LIENS

The Contractor shall deliver to the Owner a complete release of all liens arising out of this Contract before the retained percentage or before the final Request for Payment is paid. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner such amounts as the Owner may have been compelled to pay in discharging such liens including all costs and a reasonable attorney's fee.

209.15 ACCEPTANCE AND FINAL PAYMENT

When the Contractor shall have completed The Work in accordance with the terms of the Contract Documents, the Engineer shall certify his acceptance to the Owner and his approval of the Contractor's final Request for Payment, which shall be the Contract Amount plus all approved additions less all approved deductions and less previous payments made. The Contractor shall furnish evidence that he has fully paid all debts for labor, materials and equipment incurred in connection with The Work, following which the Owner shall accept The Work and release the Contractor except as to the conditions of the Performance Bond, any legal rights of the Owner, required guarantees, and Correction of Faulty Work after Final Payment, and shall authorize payment of the Contractor's final Request for Payment. The Contractor must allow sufficient time between the time of completion of The Work and approval of the final Request for Payment for the Engineer to assemble and check the necessary data.

209.16 TERMINATION OF CONTRACT

The Contract will be considered fulfilled, save as provided in any Bond or Bonds or by law, when all The Work has been completed, the final inspection made by the Engineer, and final acceptance and Final Payment have been made by the Owner.

209.17 CORRECTION OF FAULTY WORK AFTER FINAL PAYMENT

The approval of the final Request for Payment by the Engineer and the making of the Final Payment by the Owner to the Contractor shall not relieve the Contractor of responsibility for faulty materials or workmanship. The Owner shall promptly give notice of faulty materials or workmanship and the Contractor shall promptly replace any such defects discovered within one year from the date of written acceptance of The Work. The Engineer shall decide all questions arising under this paragraph.

SECTION 210 - INTENTION OF CONTRACTING PARTIES

The Contract, and all Documents incorporated therein by reference or executed in connection therewith, are intended solely to govern the relationship between the Contractor and Owner and their mutual obligations in respect to the subject of the Contract. To that end, no provision of the Contract or of any such Documents above mentioned shall be interpreted or given legal effect to create an obligation on the part of the Owner to third persons, including by way of illustration but not of exclusion, Sureties upon Performance Bonds, Payment Bonds or other Bonds, assignees of the Contractor, subcontractors, and persons performing labor, furnishing material or in any other way contributing to or assisting in the performance of the obligations of the Contractor; nor, shall any such provision be interpreted or given legal effect to afford a defense against any obligation owed or assumed by such third person to the Owner, or in any way to restrict the freedom of the Owner to exercise full discretion in its dealing with the Contractor.

END OF DIVISION

IMPORTANT

TO COMPLY WITH TITLE 74, SEC. 3109, YOU MUST COMPLETE THIS AFFIDAVIT AND RETURN IT TO OUR FINANCE DEPARTMENT BEFORE PAYMENT CAN BE MADE

VENDOR'S NAME
& ADDRESS:

_____

_____

_____

MAIL TO:

CITY OF SHAWNEE

16 West 9th Street

Shawnee, Oklahoma 74801

AFFIDAVIT OF CLAIMANT

STATE OF)
) SS.
COUNTY OF)

The undersigned (Architect, Engineer, Contractor, Supplier) of lawful age, being first duly sworn, on oath says that this invoice or claim is true and correct. Affiant further states that the (work, services, or materials) as shown by this invoice or claim have been (completed or performed) in accordance with the plans, specifications, orders, or requests, furnished the affiant. Affiant further states that (s)he has made no payment directly or indirectly to any elected official, officer, or employee of the State of Oklahoma, any county or local subdivision of the state, of money or any other thing of value to obtain payment of the invoice or procure the contract or purchase order pursuant to which an invoice is required.

_____
Engineer, Contractor, or Supplier

Subscribed and sworn before me the _____ day of _____, 202___.

_____
Notary Public (or Clerk or Judge)

_____
Architect

My commission expires _____ ,202___.

NOTE: 62 O.S. 1993, ss310.9B, authorizes any municipality executing more than one contract, exceeding $ 1,000 during the fiscal year, with an Architect, Engineer, Contractor, or Supplier to accept one affidavit applying to all work, services, or materials completed or supplied under the terms of awarded contracts, or which are needed on a continual basis; such affidavit to be in lieu of all individual affidavits for each invoice submitted in relation to such contract.

Invoice Number of Description	Date	Amount

NOTE: THIS AFFIDAVIT MUST BE RETURNED TO ABOVE ADDRESS.

TECHNICAL SPECIFICATIONS TABLE OF CONTENTS
KIDS SPACE PARK IMPROVEMENTS PROJECT

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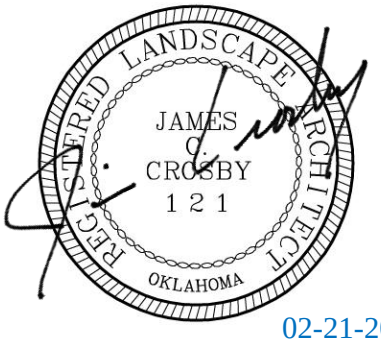

02-21-2022

SECTION 01050
FIELD ENGINEERING

PART I - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Provide and pay for field engineering services required for project.
   1. Survey work required in execution of project.
   2. Civil, structural or other professional engineering services specified, or required to execute Contractor's construction methods.
   3. Record drawings.

B. Owner's Representative will identify existing control points indicated on the drawings as required.

1.02 QUALIFICATIONS OF SURVEYOR OR ENGINEER

A. Qualified engineer or registered land surveyor, acceptable to Contractor and Owner.

B. Registered professional engineer in the State of Oklahoma, of the discipline required for the specific service required.

1.03 SURVEY REFERENCE POINTS

A. Existing basic horizontal and vertical control points for the project are those designated on drawings.

B. Locate and protect control points prior to starting site work and preserve all permanent reference points during construction.
   1. Make no changes or relocations without prior written notice to Owner.
   2. Report to Owner's Representative when any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.

1.04 PROJECT SURVEY REQUIREMENTS

A. Establish a minimum of one permanent bench mark on each site, referenced to data established by survey control points.
   1. Record locations with horizontal and vertical data on project record documents.

B. Establish lines and levels, locate and lay out, by instrumentation and similar appropriate means.
   1. Site improvements:

a. Stakes for grading, fill and topsoil placement.
b. Utility slopes for invert elevations.

2. Batter boards for structures.
3. Building foundation, column locations and floor levels.
4. Controlling lines and levels required for Divisions 15 and 16.

C. From time to time, verify layouts by same methods.

1.05 RECORDS

A. Maintain a complete, accurate log of all control and survey work as it progresses.

1.06 SUBMITTALS

A. Submit name and address of surveyor and professional engineer to Owner's Representative.

B. Submit certificates signed by registered surveyor certifying that elevations and locations of improvements are in conformance or non-conformance with contract documents.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION

SECTION 01152
APPLICATION FOR PAYMENT

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Comply with procedures described in this Section when applying for progress payment and final payment under the Contract.

B. Related work:
   1. Proposal and contract documents.

1.02 QUALITY ASSURANCE

A. Prior to start of construction, secure the Owner's Representative's approval of the schedule of values required to be submitted.

B. During progress of the work, modify the schedule of values as approved by the Owner's Representative to reflect changes in the contract sum due to change orders or other modifications of the Contract.

C. Base requests for payment on the approved schedule of values.

1.03 SUBMITTALS

A. Formal submittal: Unless otherwise directed by the Owner's Representative:
   1. Make formal submittal of request for payment by filling in the agreed data, by typewriter or neat lettering in ink, on AIA Document G702, "Application and Certificate for Payment", plus continuation sheet or sheets, or other form as approved by Owner.
   2. Sign and notarize the Application and Certificate for Payment and the City “Uniform Voucher and Invoice for Construction Services”.
   3. Submit the original of the Application and Certificate of Payment plus three (3) identical copies of the continuation sheet or sheets to the Owner's Representative.
   4. The Owner's Representative will sign the Application and Certificate for Payment, and distribute:
      a. One original and two copies to Owner;

END OF SECTION

SECTION 01200
PROJECT MEETINGS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: To enable orderly review during progress of the work and to provide for systematic discussion of problems, the Owner's Representative will conduct project meetings throughout the construction period.

B. Related work:
   1. Documents affecting work of this Section include, but are not necessarily limited to, Proposal and Contract Documents and Sections in Division 1 of these Specifications.
   2. The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are not the Owner's Representative responsibility and normally are not part of project meetings content.

1.02 QUALITY ASSURANCE

A. For those persons designated by the Contractor to attend and participate in project meetings, provide required authority to commit the Contractor to solutions agreed upon in the project meetings.

1.03 SUBMITTALS

A. Job notes:
   1. The Owner's Representative will compile job notes of each project meeting and will furnish copies to the Contractor and to the Owner.
   2. Recipients of copies may make and distribute such other copies as they wish.

PART 2 - PRODUCTS

No products are required in this Section.

PART 3 - EXECUTION

3.01 MEETING SCHEDULE

A. Except as noted below for Pre-construction Meeting, project meetings will be held monthly or as requested by the City or contractor.
B. Coordinate as necessary to establish mutually acceptable schedule for meetings.

3.02 MEETING LOCATION

A. The Owner's Representative will establish meeting location. To the maximum extent practicable, meetings will be held at the job site.

3.03 PRECONSTRUCTION MEETING

A. A Pre-construction meeting will be scheduled after issuing the Notice to Proceed.
   1. Provide attendance by authorized representatives of the Contractor and major subcontractors.
   2. The Owner will advise other interested parties, including the Owner's Representative, and request their attendance.

B. Minimum agenda: Data will be distributed and discussed on at least the following items.
   1. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers and Owner's Representative.
   2. Channels and procedures for communication.
   3. Construction schedule, including sequence of critical work and closing of any facilities.
   4. Contract documents, including distribution of required copies of original documents and revisions.
   5. Processing of shop drawings and other data submitted to Owner's Representative for review.
   6. Rules and regulations governing performance of the work.
   7. Procedures for safety and first aid, security, quality control, housekeeping and related matters.
   8. Location of underground utilities.
   9. Notification procedures for adjacent property owners.

3.04 PROJECT MEETINGS

A. Attendance:
   1. To the maximum extent practicable, assign the same person or persons to represent the Contractor at project meetings throughout progress of the work.
   2. Subcontractors, materials suppliers, and others may be invited to attend those project meetings in which their aspect of the work is involved.

B. Minimum agenda:
   1. Review, revise and approve job notes of previous meetings.
   2. Review progress of the work since last meeting, including status of submittals for approval.
   3. Identify problems which impede planned progress.
   4. Develop corrective measures and procedures to regain planned schedule.
   5. Complete other current business.

END OF SECTION

SECTION 01340
SUBMITTALS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Procedures:
1. Wherever possible throughout the Contract Documents the minimum acceptable quality of workmanship and materials has been defined by manufacturer's name and catalog number, reference to recognized industry and government standards, or description of required attributes and performance.
2. To ensure that the specified products are furnished and installed in accordance with design intent, procedures have been established for advance submittal of design data and for their review by the Owner's Representative.
3. Make all submittals required by the Contract Documents and revise and resubmit as necessary to establish compliance with the specified requirements.

B. Construction progress schedules.

C. Schedule of values.

D. Shop drawings, product data and samples.

E. Manufacturer's instructions and certificates.

F. Submittal log.

1.02 RELATED REQUIREMENTS

A. Individual requirements for submittals are described in pertinent sections of these Specifications.

B. Related work:
Section 01700: Contract Closeout: Project Record Documents, Operating and Maintenance Data, Warranties and Bonds.

1.03 QUALITY ASSURANCE/CONTRACTOR RESPONSIBILITIES

A. Coordination of submittals: Before each submittal, carefully review and coordinate all aspects of each item being submitted and verify that each item, and the submittal for it, conforms in all respects with the requirements of the Contract Documents. Coordinate with other trades as required. By affixing the

Contractor's signature to each submittal, certify that this coordination has been performed.

B. Grouping of submittals: Unless otherwise specified, make all submittals in groups containing all associated items to ensure that information is available for checking each item when it is received. Partial submittals may be rejected as not complying with the provisions of the Contract Documents and the Contractor shall be strictly liable for all delays so occasioned.

C. Timing: Make all submittals far enough in advance of scheduled dates for installation to provide all time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing deliveries.

D. Notify Owner's Representative in writing with submittal of any deviations in submittals from Contract Document requirements.

E. Do no fabrication or work which requires submittals until accepted by the Owner's Representative.

1.04 SUBMITTAL SCHEDULE

A. Compile a complete and comprehensive schedule of all submittals anticipated to be made during progress of the work. Include a list of each type of item for which Contractor's drawings, shop drawings, certificates of compliance, material samples, guarantees or other types of submittals are required. Adhere to the schedule except when specifically otherwise permitted. Submittal log is for Owner's Representative to track review.

B. Coordinate the schedule with all necessary subcontractors and materials suppliers to ensure their ability to adhere. Coordinate as required to ensure the grouping of submittals.

C. Revise and update the schedule on a monthly basis to reflect conditions and sequences. Promptly submit revised schedules to Owner's Representative for review and comment.

1.05 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. Shop Drawings:
   1. Present in clear and thorough manner, with details referenced to sheet, detail, schedule or room numbers shown on Contract Drawings. Provide quantity directed by Owner's Representative.

B. Product Data:
   1. Preparation: Clearly mark each copy to identify pertinent products or models. Show performance characteristics and capacities, dimensions and clearances required, and wiring or piping diagrams and controls.
   2. Modify manufacturer's standard drawings, diagrams and literature to delete information not applicable to work and supplement information specifically applicable to the work.

C. Samples:
   1. Office samples: Provide in quantity and size directed, complete with integrally related parts and attachment devices and illustrating functional characteristics of product and full range of color, texture and pattern.
   2. Field samples/mock-ups: Erect at project site at location acceptable to Owner's Representative in size or area specified in other specification sections. Fabricate to be complete and finished. Remove at conclusion of work or when directed.

D. Make submittals promptly and in such sequence as to cause no delay in work.

E. Submission Requirements:
   1. Quantity required:
      a. Shop drawings: Submit digital copies each..
      b. Submit index brochures of mechanical and electrical submittals (manufacturer's literature and drawings) for final approval and distribution.
      c. Product data: Complete catalogs will not be acceptable. Manufacturer's regular catalog sheets will be acceptable if they indicate completely all specification requirements. When manufacturer's catalog sheets are submitted, material not directly connected with subject shall be completely lined out. Where drawings cover several sizes or types of construction they shall clearly indicate size or type of construction to be used including a schedule identifying each piece of equipment. Submittals containing more than five different items of equipment shall be assembled with a table of contents.
   2. Submittal contents:
      a. Submission date and dates of any previous submissions.
      b. Project title and number.
      c. Names of Contractor, supplier and manufacturer.
      d. Identification of product, with specification section number.
      e. Field dimensions, clearly identified as such.
      f. Applicable standards, such as ASTM, Federal Spec numbers, etc.
      g. Relation to adjacent or critical features of work or materials.
      h. Identification of deviations from Contract Documents.
      i. Identification of revisions on resubmittals.

j. Contractor certification of submittal review, to include product verification, field measurements, quantities, coordination with adjacent equipment structural members, or architectural features, and coordination of information within submittal with requirements of work and Contract Documents. Certification may be by stamp of approval or a letter of transmittal containing a statement to the effect that they have been reviewed. Uncertified submittals will be rejected.

F. Resubmission Requirements:
1. Make corrections or changes required by Owner's Representative and resubmit until accepted.
2. Shop drawings and product data: Revise and resubmit as specified for initial submittal; indicate any changes which have been made other than those requested by Owner's Representative.
3. Samples: Submit new samples as required for initial submittal.
4. Resubmission of structural shop drawings and product data: Resubmit finalized drawings and product data. File copy to Owner's Representative and Owner; field copy to field office. Resubmit all subsequent changes with changes and dates noted.

G. Distribution:
1. Distribute reproductions of shop drawings and product data which carry Owner's Representative and Owner's stamp of approval to job site and record documents file, other affected contractors, subcontractors and supplier or fabricator.
2. Distribute samples with Owner's Representative and Owner's stamp of approval as directed by Owner's Representative.

1.06 SUBSTITUTIONS AND PRODUCT OPTIONS

Not Used

1.07 MANUFACTURER'S CERTIFICATES

A. Submit certificates in accordance with requirements of each specification section.

1.08 PROJECT RECORD DOCUMENTS

A. Submit in accordance with Section 01720 Project Record Documents.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

3.01 GENERAL PROCEDURES

A. Deliver submittals to Owner's Representative.

B. Transmit each item under Contractor's Standard Letter of Transmittal. Identify project, contractor, subcontractor, major supplier, pertinent drawing sheet and detail number and specification section number as appropriate. Identify deviations from Contract Documents.

C. Submit initial progress and submittal schedules within 15 days after execution of Contract and schedule of values with first application for payment. Update with each Application for Payment reflecting changes since previous submittal.

D. Comply with progress schedule for submittals related to work progress.

E. After Owner's Representation and Owner's review of submittal, revise and resubmit as required, identifying changes made since previous submittal.

F. Distribute copies of review submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.

3.02 OWNER'S REPRESENTATIVE REVIEW

A. Owner's Representative duties:
1. Review submittals with reasonable promptness.
2. Affix stamp and initials or signature and indicate re-submittal requirements or approval of submittal.
3. Submit to Owner for approval.
4. Return submittals to Contractor for distribution or for resubmission.

B. Review by the Owner's Representative shall not be construed as a complete check, but only that the general method of construction and detailing is satisfactory. Review shall not relieve the Contractor from responsibility for errors which may exist.

C. Authority to Proceed: The notations "Approved" or "Approved as Corrected" authorizes the Contractor to proceed with fabrication, purchase, or both, of the items so noted, subject to the revisions, required by the Owner's Representative review comments.

D. Revisions: Make only those revisions directed or approved by the Owner's Representative and Owner.

E. Revisions after approval: When a submittal has been reviewed by the Owner, re-submittal for substitution of materials or equipment will not be considered unless accompanied by an acceptable explanation as to why the substitution is necessary.

END OF SECTION

SECTION 01500
TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Provide temporary facilities and controls needed for the work including, but necessarily limited to:
   1. Temporary utilities such as heat, water, electricity and telephone;
   2. Field office for Contractor's personnel;
   3. Sanitary facilities;
   4. Enclosures such as tarpaulins, barricades and canopies;
   5. Temporary fencing of the construction site;
   6. Project sign.

B. Related work:
   1. Documents affecting work of this Section include, but are not necessarily limited to, Proposal and Contract Documents and Sections in Division 1 of these Specifications.
   2. Except that equipment furnished by Subcontractors shall comply with requirements pertinent safety regulations, such equipment normally furnished by the individual trades in execution of their own portions of the work are not part of this Section.
   3. Permanent installation and hookup of the various utility lines are described in other Sections of these Specifications.

1.02 PRODUCT HANDLING

A. Maintain temporary facilities and controls in proper and safe condition throughout progress of the work.

PART 2 - PRODUCTS

2.01 UTILITIES

A. Water:
   1. Provide as necessary temporary piping and water supply and, upon completion of the work, remove such temporary facilities.

B. Electricity:
   1. Provide necessary temporary wiring and, upon completion of the work, remove such temporary facility.
   2. Provide and pay for electricity used in construction.

C. Heating: Provide and maintain heat necessary for proper conduct of operations needed in the work.

D. Telephone and Fax:
   1. Contractor and superintendent to have cellular telephones accessible during normal business hours.
   2. Contractor to maintain telephone and fax service at the Contractor's primary office to receive job correspondence. On-site fax not required.

2.02 FIELD OFFICES AND SHEDS

A. Contractor's facilities:
   1. Contractor may at his discretion provide a field office building and sheds adequate in size and accommodation for Contractor's offices, supply and storage.
   2. Within the Contractor's facilities, provide enclosed space, for holding project meetings. Furnish with table, chairs and utilities.

B. Sanitary facilities:
   1. Provide temporary sanitary facilities in the quantity required for use by all personnel.
   2. Maintain in a sanitary condition at all times.

2.03 ENCLOSURES

A. Provide and maintain for the duration of construction all scaffolds, tarpaulins, canopies, warning signs, steps, platforms, bridges and other temporary construction necessary for proper completion of the work in compliance with pertinent safety and other regulations.

2.04 TEMPORARY FENCING

A. Provide and maintain for the duration of construction a temporary safety barricade of design and type needed to prevent entry onto the work by the public.

PART 3 - EXECUTION

3.01 MAINTENANCE AND REMOVAL

A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the work.

B. Remove such temporary facilities and controls as rapidly as progress of the work will permit, or as directed by the Owner's Representative.

END OF SECTION

SECTION 01510
SITE ACCESS

PART 1 - GENERAL

1.01 REQUIREMENTS

A. Work included: this information applies to situations in which a Contractor or his representatives including, but not limited to, suppliers, subcontractors, employees and field engineers enter upon The Project property.

B. Related work:

Section 02000:	Site Work.
Section 02070:	Selective Demolition.
Section 02100:	Site Preparation.
Section 02220:	Excavating, Backfilling & Compacting.

1.02 QUALITY ASSURANCE

A. Upon approval by Owner for access, notify all pertinent personnel regarding requirements of this information.

B. Require that all personnel who will enter upon property certify their awareness of and familiarity with the requirements of the Owner.

C. Tree protection in accordance with Section 02100.

1.03 SUBMITTALS

A. Maintain an accurate record of the names and identification of all persons entering upon Park property and permit periodic review of record by Owner and/or Owner's Representative.

B. Pre-construction photographs per Paragraph 1.07.

1.04 TRANSPORTATION FACILITIES

A. Vehicle and equipment access:

1. Provide protection for curbs, sidewalks, roads, parking, utilities and amenities over which trucks and equipment pass to reach work areas.

Contractor's vehicles:
Limit the access of vehicles belonging to employees and all other vehicles entering upon Park property to use only the access route shown on the drawings.
Do not permit vehicles to park on any other area of the property except in the areas so designated at the pre-construction meeting.

1.05 NOTIFICATION BY CONTRACTOR

A. The Contractor shall notify the Owner, in writing, two weeks in advance of any proposed construction activity on Owner's property. Said notice does not constitute authority to proceed with work in the Park. Official notice of approval will be at the discretion of the Owner.

1.06 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

A. The Contractor shall be responsible for the preservation of all property and shall protect carefully from disturbance or damage all said property witnessed or otherwise referenced their location and shall not move any item until directed.

B. The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work, or at any time due to defective work or materials.

C. The Contractor shall consult with the Owner regarding his work activities and shall install any and all barriers, warning signs, fencing, property protection, access control or other devices to the satisfaction of the Owner and needed to provide for public safety and protection of Property.

D. When or where any direct or indirect damage or injury is done to property by or on account of any act, omission, neglect, or misconduct in the execution of the work or in consequence of the non-execution thereof by the Contractor, he shall restore, at his own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding or otherwise restoring as may be directed by the Owner or he shall make good such damage or injury in an acceptable manner to the Owner.

E. Tree protection in accordance with Section 02100.

F. The contractor will work out a mutually acceptable plan with the Owner to provide access to the existing tennis courts and existing parking lot to accommodate league play.

1.07 PRE-CONSTRUCTION PHOTOGRAPHS OR VIDEO

A. The Contractor shall provide digital photographs or video tapes of the specified work area one day prior to any work starting, but after appropriate construction staking and protection.

B. Photographs shall be 3" x 5" color prints with information on the back of each print as follows: Show the job name, location of photograph, date of photograph and photographer's name, address and photograph number.

C. Photographs shall be from a minimum of twenty-four (24) diversified overall views of the work area and of any pertinent Park property within construction limits. Additional photos may be required in unusual or extremely large sites.

D. Each photograph shall be clear, in focus, with high resolution and sharpness and with minimum distortion.

1.08 CLEANING

A. Progress cleaning:
   1. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, packaging and shipping material. Remove such items from premises weekly.
   2. Weekly, and more often if necessary, inspect all materials stored on site, re-stack, tidy, or otherwise arrange in safe condition.

B. Final cleaning:
   1. Completely remove resultant construction debris, particularly any loose rock or stone imported or uncovered during construction.
   2. Broom clean paved areas on site.
   3. Mow grass areas as directed which had not been under normal maintenance.
   4. Repair any areas of turfing that have been damaged by construction operations in accordance with Section 02934 Sodding.
   5. Alleviate compacted turf areas if access has been over turf, but no turf has to be placed. Compaction should be alleviated by a coring implement with 6" O.C. minimum coverage of 3" deep. Drag cores until leveled.
   6. Often when fences are erected for protection, holes are left when fence posts are pulled. Holes should be filled with appropriate top soil and settled with water to grade.

1.09 RECORD DOCUMENTS

A. Submit to Owner a complete record drawing clearly indicating all work both concealed and visible.

B. Information shall be tied to base line control data of the Owner and so noted on the Owner's field books.

1.10 FINAL APPROVAL

A. Upon the completion of all work a final inspection must be made by the Owner to determine whether the work has been completed in accordance with the contract, plans and/or specifications.

B. When the work has been so completed the Owner will provide certification of same and forward to appropriate contracting authorities.

C. Acceptance by Owner shall not restrict or prohibit the rights provided for in regard to latent defects, frauds or such gross mistakes as may amount to fraud or as regards the rights under any warranty guarantee.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION

SECTION 01700
CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Provide an orderly and efficient transfer of the completed work to the Owner.

B. Related work:
   1. Proposal and contract documents.

1.02 QUALITY ASSURANCE

A. Prior to requesting inspection by the Owner's Representative, use adequate means to assure that the work is completed in accordance with the specified requirements and is ready for the requested inspection.

1.03 PROCEDURES

A. Substantial Completion:
   1. Contractor:
      a. Submit written certification through Owner's Representative to the Owner that project is substantially complete in accordance with the construction contract.
      b. Submit list of major items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the contractor to complete all work in accordance with the contract documents.
   2. Owner's Representative will make an inspection within seven (7) days after receipt of certification together with the Owner.
   3. Should Owner's Representative consider that work is substantially complete in accordance with the construction contract:
      a. Contractor shall prepare a punch list of items to be completed or corrected as determined by the inspection.
      b. The Owner will prepare a Certificate of Substantial Completion for the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate. The Certificate of Substantial Completion shall contain the following:
         (1) Date of Substantial Completion;
         (2) Punch list of items to be completed or corrected.
         (3) The time within which Contractor shall complete or correct work of listed items.
         (4) Date and time Owner will assume possession of work or designated portion thereof.

c. Contractor shall:
(1) Complete work listed for completion or correction within the designated time.
(2) Refer to Construction Contract for post substantial completion requirements.

4. Should Owner's Representative consider that work is not substantially completed:
a. He shall immediately notify Contractor in writing stating reasons.
b. Contractor: Complete work and send second written notice through Owner's Representative to Owner certifying that the project is substantially complete.
c. Owner's Representative will re-inspect work.

B. Final Completion:
1. Contractor shall submit written certification that:
a. Contract documents have been reviewed;
b. Project has been inspected for compliance with contract documents.
c. Work has been completed in accordance with the construction contract.
d. Equipment and systems have been tested in presence of Owner and are operational.
(1) Equipment and systems shall be operated in a normal mode for a minimum period of three (3) weeks prior to final inspection.
e. Owner's personnel have been instructed in operation of all systems, mechanical, electrical and other equipment.
f. Project is completed, ready for final inspection.

2. Owner's Representative will make final inspection within seven (7) days after receipt of certification.

3. Should Owner's Representative consider that work is finally complete in accordance with contract documents, contractor shall submit final Application for Payment.

4. Should Owner's Representative consider that work is not finally complete:
a. He shall notify contractor, in writing, stating reasons.
b. Contractor shall take immediate steps to remedy the stated deficiencies and send second written notice through Owner's Representative to Owner certifying that work is complete.
c. Owner's Representative will re-inspect work.

1.04 REINSPECTION COSTS

A. Should Owner's Representative be required to perform more than two (2) inspections for project substantial completion and project final completion, respectively because of failure of work to comply with original certifications of contractor, the contractor will compensate Owner's Representative for additional services to include time and reimbursable expenses incurred by the Owner's Representative and his consultants. This amount will be deducted from final payment to the Contractor.

1.05 RETURN OF CONTRACT DOCUMENTS

A. Return of Drawings: Drawings, details, sketches and specifications are property of Owner, and are issued to contractor as instruments of service only. If required, contractor shall return same to Owner.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

END OF SECTION

SECTION 01720
PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included:
   1. Throughout progress of the work, maintain an accurate record of changes in the Contract Documents as described in Article 3.01 below.
   2. Upon completion of the work, transfer the recorded changes to a set of Record Documents, as described in Article 3.02 below.

B. Related work:
   1. Proposal and contract documents.
   2. Other requirements affecting Project Record Documents may appear in pertinent other Sections of these Specifications.

1.02 QUALITY ASSURANCE

A. Delegate the responsibility for maintenance of Record Documents to one person on the Contractor's staff as approved by the Owner's Representative.

B. Accuracy of records:
   1. Thoroughly coordinate changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to show the change properly.
   2. Accuracy of records shall be such that future search for items shown in the Contract Documents may relay reasonably on information obtained from the approved Project Record Documents.

C. Make entries within 24 hours after receipt of information that the change has occurred.

1.03 SUBMITTALS

A. Comply with pertinent provisions of Section 01340.

B. The Owner's Representative's approval of the current status of Project Record Documents may be a prerequisite to the Owner's Representative approval of requests for progress payment and request for final payment under the Contract.

C. Prior to submitting each request for progress payment, secure the Owner's Representative's approval of the current status of the Project Record Documents.

D. Prior to submitting request for final payment, submit the final Project Record Documents to the Owner's Representative and secure his approval.

1.04 PRODUCT HANDLING

A. Maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the work and transfer all recorded data to the final Project Record Documents.

B. In the event of loss of recorded data, use means necessary to again secure the data to the Owner's Representative's approval.
   1. Such means shall include, if necessary in the opinion of the Owner's Representative, removal and replacement of concealing materials.
   2. In such case, provide replacements to the standards originally required by the Contract Documents.

PART 2 - PRODUCTS

2.01 RECORD DOCUMENTS

A. Job set: Promptly following receipt of the Owner Notice to Proceed, secure from the Owner's Representative at no charge to the Contractor one complete set of all Documents comprising the Contract.

B. Final Record Documents: At the time of completion of the work, deliver all job as-built plans to the Owner’s Representative clearly marked and legible.

PART 3 - EXECUTION

3.01 MAINTENANCE OF JOB SET

A. Immediately upon receipt of the job set described in Paragraph 2.01 above, identify each of the Documents with the title, "RECORD DOCUMENTS - JOB SET."

B. Preservation:
   1. Considering the Contract completion time, the probable number of occasions upon which the job set must be taken out for new entries and for examination, and the conditions under which these activities will be performed, devise a suitable method for protecting the job set to the approval of the Owner's Representative.
   2. Do not use the job set for any purpose except entry of new data and for review by the Owner's Representative until start of transfer of data to final Project Record Documents.
   3. Maintain the job set at the site of work as that site is designated by the Owner's Representative.

C. Making entries on Drawings:
   1. Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by graphic line and note as required.
   2. Date all entries.
   3. Call attention to the entry by a "cloud" drawn around the area or areas affected.
   4. In the event of overlapping changes, use different colors for the overlapping changes.

D. Make entries in the pertinent other Documents as approved by the Owner's Representative.

E. Conversion of schematic layouts:
   1. In some cases on the Drawings, arrangements of conduits, circuits, piping, ducts and similar items is shown schematically and is not intended to portray precise physical layout.
      a. Final physical arrangement is determined by the Contractor, subject to the Owner's Representative's approval.
      b. However, design of future modifications of the facility may require accurate information as to the final physical layout of items which are shown only schematically on the Drawings.
   2. Show on the job set of Record Drawings, by dimension accurate to within one inch, the centerline of each run of items such as are described in subparagraph 3.01 E. 1. above.
      a. Clearly identify the item by accurate note such as "cast iron drain", "galv. water" and the like.
      b. Show, by symbol note, the vertical location of the item ("under slab", "in ceiling plenum", "exposed" and the like).
      c. Make all identification sufficiently descriptive that it may be related reliably to the Specifications.
   3. The Owner's Representative may, subject to Owner approval, waive the requirements for conversion of schematic layouts where, in the Owner's Representative's judgement, conversion serves no useful purpose. However, do not rely upon waivers being issued except as specifically issued in writing by the Owner.

3.02 FINAL PROJECT RECORD DOCUMENTS

A. The purpose of the final Project Record Documents is to provide factual information regarding all aspects of the work, both concealed and visible, to enable future modification of the work to proceed without lengthy and expensive site measurement, investigation and examination.

B. Approval of recorded data prior to transfer:

1. Secure the Owner's Representative's approval that all recorded data is clearly marked and legible.
2. Make required revisions requested by the Owner's Representative.

C. Transfer of data to other Documents:
1. If the Documents other than Drawings have been kept clean during progress of the work, and if entries thereon have been orderly to the approval of the Owner's Representative, the job set of those Documents other than Drawings will be accepted as final Record Documents.
2. If any such Document is not so approved by the Owner's Representative, secure a new copy of that Document from the Owner's Representative at the Owner's Representative's usual charge for reproduction and handling and carefully transfer the change data to the new copy to the approval of the Owner's Representative.

D. Review and submittal:
1. Submit the completed set of Project Record Documents to the Owner's Representative.
2. Participate in review meetings as required.

E. Final Record Documents: At the time of completion of the work, deliver all job as-built plans to the Owner's Representative clearly marked and legible. The Owner's Representative will transfer the contractor's information electronically to the original contract documents.
1. The Contractor is responsible for the accuracy of all information contained within the Record Documents. The Owner's Representative is not responsible for the accuracy of the information and is responsible only for entering the information into the original Construction Documents.
2. The Owner's Representative will be responsible for delivering the final Record Documents to the Owner.

END OF SECTION

SECTION 01730
OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: To aid the continued instruction of operating and maintenance personnel and to provide a positive source of information regarding the products incorporated into the work, furnish and deliver the data described in this Section and in pertinent other Sections of these Specifications.

B. Related work:
   1. Proposal and construction documents.
   2. Required contents of submittals also may be amplified in pertinent other Sections of these Specifications.

1.02 QUALITY ASSURANCE

A. In preparing data required by this Section, use only personnel who are thoroughly trained and experienced in operation and maintenance of the described items, completely familiar with the requirements of this Section and skilled in technical writing to the extent needed for communicating the essential data.

1.03 SUBMITTALS

A. Comply with pertinent provisions of Section 01340.

B. Submit two copies of a preliminary draft of the proposed Manual or Manuals to the Owner's Representative for review and comments.

C. Unless otherwise directed in other Sections, or in writing by the Owner's Representative, submit four copies of the final Manual to the Owner's Representative prior to indoctrination of operation and maintenance personnel.

PART 2 - PRODUCTS

2.01 INSTRUCTION MANUALS

A. Where instruction Manuals are required to be submitted under other Sections of these Specifications, prepare in accordance with the provisions of this Section.

B. Format:
   1. Size: 8-1/2" x 11".
   2. Paper: White bond, at least 20 lb. Wt.
   3. Text: Neatly written or printed.

4. Drawings: 11' in height; bind in with text; foldout acceptable, not to exceed 11x17".
5. Flysheets: Separate each portion of the Manual with neatly prepared flysheets briefly describing contents of the ensuing portion; flysheets may be in color.
6. Binding: Use heavy-duty plastic or fiberboard covers with binding mechanism concealed inside the Manual; 3-ring binders will be acceptable; all binding is subject to Owner's Representative's approval.
7. Measurements: Provide all measurements in U.S. standard units such as feet and inches, lbs, and cfm.

C. Provide front and back covers for each Manual, using durable material approved by the Owner's Representative and clearly identified on or through the cover with at least the following information:

OPERATING AND MAINTENANCE INSTRUCTIONS
Name and address of work
Name of Contractor
General Subject of this Manual

_____
Owner's Representative

D. Contents: Include at least the following:
1. Neatly typewritten index near the front of the Manual.
2. For architectural products, applied materials and finishes:
   a. Manufacturer's data, giving full information on finishes:
      (1) Catalog number, size, composition.
      (2) Color and texture designations.
      (3) Information required for reordering special manufactured products.
   b. Instructions for care and maintenance:
      (1) Manufacturer's recommendations for types of cleaning agents and methods.
      (2) Cautions against cleaning agents and method which are detrimental to product.
      (3) Recommended schedule for cleaning and maintenance.
   c. All approved submittals.
3. For moisture protection and weather exposed products:
   a. Manufacturer's data, giving full information on products.
      (1) Applicable standards.
      (2) Chemical composition.
      (3) Details of installation.
   b. Instructions for inspection, maintenance and repair.
   c. All approved submittals.

4. For each electric and electronic system and mechanical system as appropriate:
   a. Description of system and component parts. Function, normal operating characteristics and limiting conditions. Complete nomenclature and commercial number of replaceable parts.
   b. Circuit directories of panel boards: Electrical service, controls and communications.
   c. Operating procedures: Routine and normal operating instructions, sequences required and special operating instructions.
   d. Maintenance procedures: Routine operations, guide to "trouble-shooting", disassembly, repair and re-assembly and adjustment and checking.
   e. Manufacturer's printed operating and maintenance instructions.
   f. List of original manufacturer's spare parts, manufacturer's current prices and recommended quantities to be maintained in storage.
   g. Other data as required under pertinent sections of specifications.
   h. All approved submittals.
5. Certificate of substantial completion.
6. Master list of extended warranty items.

PART 3 - EXECUTION

3.01 INSTRUCTION MANUALS

A. Preliminary:
   1. Prepare a preliminary draft of each proposed Manual.
   2. Show general arrangement, nature of contents in each portion, probable number of drawings and their size, and proposed method of binding and covering.
   3. Secure the Owner's Representative's approval prior to proceeding.

B. Final:
   1. Complete the Manuals in strict accordance with the approved preliminary drafts and the Owner's Representative's review comments.

C Revisions:
   1. Following the indoctrination and instruction of operation and maintenance personnel, review all proposed revisions of the Manual with the Owner's Representative.

END OF SECTION

SECTION 02000
SITE WORK

PART 1 - GENERAL

1.01 DESCRIPTION

A. These general site work requirements apply to all site work operations. Refer to Division 2 specification sections for specific general, product and execution requirements.

B. Related work:

Section 01510:	Site Access.
Section 02070:	Selective Demolition.
Section 02100:	Site Preparation.
Section 02220:	Excavating, Backfilling and Compacting.

1.02 QUALITY ASSURANCE

A. Comply with all applicable local, state and federal requirements regarding materials, methods of work and disposal of excess and waste materials.

1.03 PROJECT CONDITIONS

A. Locate and identify existing underground and overhead services and utilities within contract limit work areas. Provide adequate means of protection of utilities and services designated to remain. Repair utilities damaged during site work operations at Contractor's expense.

B. Arrange for disconnection, disconnect and seal or cap all utilities and services designated to be removed before start of site work operations. Perform all work in accordance with the requirements of the applicable utility company or agency involved.

C. When uncharted or incorrectly charted underground piping or other utilities and services are encountered during site work operations, notify the applicable utility company immediately to obtain procedure directions. Cooperate with the applicable utility company in maintaining active services in operation. If the services are Owner maintained, notify Owner's Representative immediately.

D. Locate, protect and maintain bench marks, monuments, control points and project engineering reference points. Re-establish disturbed or destroyed items at Contractor's expense.

E. Perform site work operations and the removal of debris and waste materials to assure minimum interference with streets, walks and other adjacent facilities.

F. Give the owner 24 hour advanced notice to close or obstruct street, walks and adjacent facilities. Provide alternate routes around closed or obstructed traffic ways.

G. Control dust caused by the work. Dampen surfaces as required. Comply with pollution control regulations of governing authorities.

H. Protect existing buildings, paving and other services or facilities on site and adjacent to the site from damage caused by site work operations. Cost of repair and restoration of damaged items at Contractor's expense.

I. Protect and maintain street lights, utility poles and services, traffic signal control boxes, curb boxes, valves and other services, except items designated for removal. Remove or coordinate the removal of traffic signs, parking meters and postal mail boxes with the applicable governmental agency. Provide for temporary relocation when required to maintain facilities and services in operation during construction work.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.01 PREPARATION

A. Examine the areas and conditions under which site work is performed. Do not proceed with the work until unsatisfactory conditions are corrected.

B. Consult the records and drawings of adjacent work and of existing services and utilities which may affect site work operations.

END OF SECTION

SECTION 02070
SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Carefully demolish and remove from the site those items scheduled to be demolished and removed.

B. Related work:
   1. Documents affecting work of this Section include, but are not necessarily limited to Proposal and Contract Documents and Sections in Division 1 of these Specifications.
   2. Section 01510: Site Access.

1.02 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

A. By careful study of the Contract Documents, determine the location and extent of selective demolition to be performed.

B. Visit the site and verify the extent and location of selective demolition required.
   1. Carefully identify limits of selective demolition.
   2. Mark interface surfaces as required to enable workmen also to identify items to be removed and items to be left in place intact.

C. Prepare and follow an organized plan for demolition and removal of items.
   1. Shut off, cap and otherwise protect existing public utility lines in accordance with the requirements of the public agency or utility having jurisdiction.
   2. Completely remove items scheduled to be so demolished and removed, leaving surfaces clean, solid and ready to receive new materials specified elsewhere.

3. In all activities, comply with pertinent regulations of governmental agencies having jurisdiction.

D. Demolished material shall be considered to be property of the Contractor and shall be completely removed from the job site unless otherwise specified.

E. Use means necessary to prevent dust becoming a nuisance to the public, to neighborhoods and to other work being performed on or near the site.

3.02 REPLACEMENTS

A. In the event of demolition of items not so scheduled to be demolished, promptly replace such items to the approval of the Owner at no additional cost to the Owner.

END OF SECTION

SECTION 02100
SITE PREPARATION

PART 1 - GENERAL

1.01 DESCRIPTION

A. Perform site preparation work as shown and specified. The work includes:
   1. Protecting existing trees to remain.
   2. Removing trees and other vegetation.
   3. Removing designated site improvements.

B. Related work:
   Section 01510: Site Access.

1.02 QUALITY ASSURANCE

A. Comply with Section 02000 Site Work requirements.

B. Notify all contractor employees and subcontractors of provisions of this Section.

C. Council of Tree and Landscape Appraisers

PART 2 - PRODUCTS

2.01 MATERIALS

A. Materials and equipment: As selected by the contractor except as noted.

B: Tree protection:
   1. Wood fencing, snow fencing.

PART 3 - EXECUTION

3.01 TREE PROTECTION

A. Protect existing trees scheduled to remain against injury or damage, including cutting, breaking or skinning of roots, trunks or branches; smothering by stockpiled construction materials, excavated materials or vehicular traffic within branch spread.
   1. Protect designated trees with temporary wood or vinyl snow fence enclosure. Provide a minimum 12'-0" radius from center of tree trunk. Increase enclosure size as directed for large trees up to and including the drip line.

2. Erect temporary fencing before commencing site preparation work. Maintain fencing during full construction period. Remove temporary fencing when acceptable to Owner's Representative.
4. Repair trees scheduled to remain and damaged by construction operations in a manner acceptable to the Owner's Representative. Repair damaged trees promptly to prevent progressive deterioration caused by damage.
5. Replace trees scheduled to remain and damaged beyond repair by construction operations as determined by the Owner's Representative with trees of similar size and species of equal dollar value. Cost for tree replacement shall be determined in accordance with the "Guide for Establishing The Value of Trees and Other Plants", published by the Council of Tree and Landscape Appraisers.
6. Tree replacement as required by paragraph 5 shall be in accordance with Specification Section 02900 Trees, Plants and Ground Covers.
7. Replacement of trees scheduled to remain and damaged by construction operations during construction operations, and securing an opinion as to the tree or plant's health and its value, shall be at contractor's expense.
8. Tree loss appraisal shall be in accordance with the "Guide for Establishing the Values of Trees and Other Plants", by the Council of Tree and Landscape Appraisers.

3.02 CLEARING

A. Locate and suitably identify trees and improvements indicated to remain.

B. Clear and grub areas within contract limits as required for site and execution of the work.

C. Remove trees as designated on the plans with the approval of the Owner's Representative.

3.03 STRIPPING TOPSOIL

A. Strip topsoil to its full depth at all areas to be re-graded, resurfaced or paved within contract limit work area.

B. Stockpile topsoil in a location acceptable to the Owner's Representative for use in finish grading and preparation of lawns and planting beds.
   1. Grade and slope stockpiles for proper drainage and to prevent erosion.
   2. No topsoil shall be removed from the site.

C. Protect all areas which are not to be resurfaced or re-graded and adjacent areas outside of the contract limits from damage due to site preparation work.

3.04 SITE IMPROVEMENTS

A. Existing Utilities
   1. Information on the drawings relating to existing utility lines and services is from the best sources presently available. All such information is furnished only for information and is not guaranteed. Excavate test pits as required to determine exact locations of existing utilities.
   2. Call Okie for utility staking not County owned.
   3. Call Owner's Representative to coordinate County maintained utility staking.

3.05 DISPOSAL OF WASTE MATERIALS

A. Stockpile, haul from site and legally dispose of waste materials and debris. Accumulation is not permitted.

B. Maintain disposal routes clear, clean and free of debris.

C. On-site burning of combustible cleared materials is allowed with proper permit and burn pit.

3.06 CLEANING

A. Upon completion of site preparation work, clean area within contract limits, remove tools and equipment. Provide site clear, clean and free of materials and debris and suitable for site work operations.

END OF SECTION

SECTION 02211
ROUGH GRADING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Removal and stockpiling of topsoil and subsoil.
B. Cutting, grading, filling and rough contouring the site.

1.02 RELATED SECTIONS

A. Section 021010 - Site Preparation.
B. Section 02220 - Excavating, Backfilling & Compaction.
C. Section 02265 - Finish Grazing: Finish grading with topsoil to contours.

1.03 REFERENCES

A. Relations of soils and Soil-Aggregate Mixtures, Using 5.5 lb Rammer and 12 inch Drop.
B. ANSI/ASTM D 1556 - Test Method for Density of Soil in Place by the Sand-Cone Method.
C. ANSI/ASTM D1557 - Test Methods for Moisture-Density Relations of soils and Soil-Aggregate Mixtures Using 10 lb. Rammer and 18 inch Drop.

1.04 PROJECT RECORDS DOCUMENTS

A. Submit under provisions of section 01700.
B. Accurately record actual locations of utilities remaining, by horizontal dimensions, elevations or inverts, and slops gradients.

PART 2 PRODUCTS

2.01 SOIL MATERIALS

A. Off-Site Fill: Off-site fill shall be material with plasticity index less than 18 and shall contain at least 15% fines (material passing #200 sieve.)

PART 3 EXECUTION

3. 01 EXAMINATION

A. Verify site conditions.
B. Verify that survey benchmark and intended elevations for the work are as indicated.

3.02 PREPARATION

A. Identify required lines. levels. Contours, and datum.
B. Identity known underground, above ground, and aerial utilities. Stake and flag locations.
C. Notify utility company as necessary to remove and relocate utilities.
D. Protect above and below grade utilities which are to remain.
E. Protect plant life, lawns, rock outcropping and other features remaining as portion of final landscaping.
F. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.

3.03 TOPSOIL EXCAVATION

A. Excavate topsoil from areas to be further excavated, re-landscaped, or re-graded.
B. Stockpile in area designated on site. Remove excess topsoil not being reused, from site.
C. Do not excavate wet topsoil.
D. Stockpile to depth not exceeding 8 feet. Cover to protect from erosion.

3.04 SUBSOIL EXCAVATION

A. Excavate subsoil from areas to be further excavated, re-landscaped, or re-graded.
B. Stockpile in area designated on site. Remove excess subsoil not being reused, from site.
C. Do not excavate wet subsoil.
D. Stockpile subsoil to depth not exceeding 8 feet. Cover to protect from erosion.
E. When excavation through roots is necessary, perform work by hand and cut roots with sharp axe.

3.05 FILLING

A. Fill areas to contours and elevations with unfrozen materials
B. Granular Fill: Place and compact materials in continuous layers not exceeding 8 inches compacted depth, compacted to 95 percent.

C. Subsoil and Topsoil Fill: Place and compact material in continuous layers not exceeding 9 inches compacted depth compacted to 95 percent.
D. Maintain optimum moisture content of fill materials to attain required compaction density.
E. Slope grade away from building minimum 2 inches in 10 ft, unless noted otherwise.
F. Make grade changes gradual. Blend slope into level areas.
G. Remove surplus fill materials from site.

3.06 TOLERANCES

A. Top Surface of Subgrade: Plus or minus 1/10 foot.

3. 07 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01410.
B. Tests and analysis of fill materials will be performed in accordance with ANSI/ASTM D698 D1557 and with Section 01410.
C. Compaction testing will be performed in accordance with ANSI/ASTM D968 and with Section 01410.
D. If test indicate Work does not meet specified requirements, remove work, replace and retest at no cost to owner.
E. Frequency of Test: 50 feet on center.

END OF SECTION

SECTION 02220
EARTHWORK

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Excavate, backfill, compact and grade the site to the elevations shown on the drawings as specified herein and as needed to meet the requirements of the construction shown in the Contract Documents.

B. Related work:
1. Documents affecting work of this Section include, but are not necessarily limited to, Proposal and Contract Documents and Sections in Division 1 of these Specifications.
2. Section 01510: Site Access.

1.02 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B. Use equipment adequate in size, capacity and numbers to accomplish the work of this Section in a timely manner.

PART 2 - PRODUCTS

2.01 SOIL MATERIALS

A. Fill and backfill materials:

1. Provide soil materials free from organic matter and deleterious substances, containing no rocks or lumps over 6” in greatest dimension and with not more than 15% of the rocks or lumps larger than 2-1/2” in their greatest dimension.
2. Fill material is subject to the approval of the Owner’s Representative and is that material removed from excavations or imported from off-site borrow areas, predominantly granular, non-expansive soils free from roots and other deleterious matter.
3. Do not permit rocks having a dimension greater than 1” in the upper 12” of fill or embankment.
4. Where fill material is required to build up a building pad and/or under building slabs, provide select low PI material. Select fill material used should be free of organic or other deleterious matters, have a maximum particle size of three (3) inches, and have a liquid limit less than thirty-five

(35) and a plasticity index between six (6) and twelve (12) and consist of sandy clays or clayey sands.

5. Where granular base is called for under building slabs, provide aggregate complying with requirements of Section 03300 of these Specifications.

2.02 TOPSOIL

A. Where shown on the drawings or otherwise required, provide topsoil consisting of friable fertile soil of loamy character containing a minimum of 2% decayed organic matter (humus) normal to the region, capable of sustaining healthy plant life and reasonably free from subsoil, roots, heavy or stiff clay, stones larger than 1" in greatest dimension, noxious weeds, sticks, brush, litter and other deleterious matter.

B. Obtain topsoil from sources within the project limits or provide imported topsoil obtained from sources outside the project limits or from both sources.

2.03 OTHER MATERIALS

A. Provide other materials not specifically described but required for complete and proper installation as selected by the Contractor subject to the approval of the Owner's Representative.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

A. Utilities: Refer to Section 2000 Site Work.

B. Protection of persons and property:

1. Barricade open holes and depressions occurring as part of the work and post warning lights on property adjacent to or with public access.
2. Operate warning lights during hours from dusk to dawn each day and as otherwise required.
3. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, washout and other hazards created by operations under this Section.

C. De-watering:

1. Remove all water, including rain water, encountered during trench and sub-structure work to an approved location by pumps, drains and other approved methods.
2. Keep excavations and site construction area free from water.

D. Use means necessary to prevent dust becoming a nuisance to the public, to neighbors and to other work being performed on or near the site.

E. Maintain access to adjacent areas at all times.

3.02 EXCAVATING

A. Perform unclassified excavating of every type of material encountered within the limits of the work to the lines, grades and elevations indicated and specified herein.

B. Excavation of rock:
   1. Where rocks, boulders, or similar material is encountered and where such material cannot be removed or excavated by conventional earth moving or ripping equipment, take required steps to proceed with the general grading operations of the work and remove or excavate such material by means which will neither cause additional cost to the Owner nor endanger buildings or structures whether on or off the site.
   2. Do not use explosives without written permission from the Owner's Representative.
   3. The definition of "Rock Excavation" will apply as stated in the "Standard Specifications for Highway Construction", Oklahoma Department of Transportation, edition of 1988 or latest revision.

C. Excavate and backfill in a manner and sequence that will provide proper drainage at all times.

D. Borrow:
   1. Obtain material required for fill or embankment in excess of that produced within the grading limits of the work from borrow areas selected and paid for by the Contractor and approved by the Owner's Representative.
   2. Grade borrow areas upon completion to provide complete surface drainage and to blend with surrounding contours.
   3. Contractor is required to excavate sufficient material to construct contours and features as per plans. Payment of all excavation will be paid as a lump sum.

E. Surplus material:
   1. Owner's Representative will direct contractor in the placement of surplus excavated material.
   2. Surplus material will be used on the project or stored on site at a location approved be the Owner's Representative.

F. Swales, ditches and gutters:
   1. Cut accurately to the cross sections, grades and elevations shown on the grading plans.
   2. Maintain excavations free from detrimental quantities of leaves, sticks, trash and other debris until completion of the work.
   3. Swales and ditches shall be smooth in nature to accommodate standard mowing practices and equipment.

G. Unauthorized excavation:
   1. Unauthorized excavation consists of removal of materials beyond indicated sub-grade elevations or dimensions without specific instruction from the Owner's Representative.

2. Under footings, foundations or retaining walls:
   a. Fill unauthorized excavations by extending the indicated bottom elevation of the footing or base to the excavation bottom without altering the required top elevation.
   b. When acceptable to the Owner's Representative, lean concrete fill may be used to bring the bottom elevation to proper position.
3. Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations, unless otherwise directed by the Owner's Representative.

H. Stability of excavations:
1. Slope sides of excavations to 1:1 or flatter, unless otherwise directed by the Owner's Representative.
2. Shore and brace where sloping is not possible because of space restrictions or stability of the materials being excavated.
3. Maintain sides and slopes of excavations in a safe condition until completion of backfilling.

I. Excavating for structures:
1. Conform to elevations and dimensions shown within a tolerance of 0.10 ft and extending a sufficient distance from footings and foundations to permit placing and removing concrete formwork, installation of services, other construction required and for inspection.
2. In excavating for footings and foundations, take care not to disturb bottom of excavation:
   a. Excavate by hand tools to final grade just before concrete is placed.
   b. Trim bottoms to required lines and grades to leave solid base to receive concrete.
3. Excavate for footings and foundations only after general site excavating, filling and grading are complete.

J. Cold weather protection:
1. Protect excavation bottoms against freezing when atmospheric temperature is less than 35 degrees F.

K. Excavating for detention ponds:
1. The exposed sub-grade of pond areas shall be scarified to a minimum depth of 8 inches. Before compaction, the scarified soils shall be adjusted to within a moisture content range of plus or minus 2 percent of optimum moisture content.

3.03 FILLING AND BACKFILLING

A. General:

1. For each classification listed below, place acceptable soil material in layers to required sub-grade elevations.
2. In excavations:
   a. Use satisfactory excavated or borrow material.
3. Building pads and/or under building slabs:
   a. Provide Select low PI material to build up building pad and slab to elevations called out on the drawings. If the material on site is not suitable, the select material will need to be imported from off site.
   b. Use granular fill, if so called for on the drawings or soils report, complying with aggregate acceptable under Section 03300 of these Specifications.

B. Ground surface preparation:
1. Remove vegetation, debris, unsatisfactory soil materials, obstructions and deleterious matter from ground surface prior to placement of fills.
2. Plow, strip or break up sloped surfaces steeper than one vertical to four horizontal so that fill material will bond with existing surface.
3. When existing ground surface has a density less than that specified under "compacting" for the particular area, break up the ground surface, pulverize, moisture-condition to the optimum moisture content and compact to required depth and percentage of maximum density.

C. Placing and compacting:
1. Place backfill and fill materials in layers not more than 8" in loose depth.
2. Before compacting, moisten or aerate each layer as necessary to provide the optimum moisture content.
3. Compact each layer to required percentage of maximum density for area. Compact per paragraph 3.05 A., B. and C. this Section.
4. Do not place backfill or fill material on surfaces that are muddy, frozen or containing frost or ice.
5. Place backfill and fill materials evenly adjacent to structure's required elevations.
6. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around the structure to approximately the same elevation in each lift.

3.04 GRADING

A. General:
1. Uniformly grade the areas within limits of grading under this Section, including adjacent transition areas.
2. Smooth the finished surface within specified tolerance.

3. Compact with uniform levels or slopes between points where elevations are shown on the drawings or between such points and existing grades.
4. Where a change of slope is indicated on the drawings, construct a rolled transition section having a minimum radius of approximately 8'-0" unless adjacent construction will not permit such a transition or if such a transition defeats positive control of drainage.

B. Grading outside building lines:
1. Grade adjacent to buildings to achieve drainage away from the structures and to prevent ponding.
2. Finish the surfaces to be free from irregular surface changes, and:
a. Shape the surface of areas scheduled to be under walks to line, grade and cross-section with finished surface not more than 0.10 ft above or below the required sub-grade elevation.
b. Shape the surface of areas scheduled to be under pavement to line, grade and cross-section, with finished surface not more than 0.05 ft above or below the required sub-grade elevation.

3.05 COMPACTING

A. Control soil compaction during construction to provide the minimum percentage of density specified for each area as determined according to ASTM D1557. All areas are to achieve a 95% proctor density minimum, and an 85% proctor density for the final lift in sod and planting areas only.
B. Provide not less than the following maximum density of soil material compacted at optimum moisture content for the actual density of each layer of soil material in place and/or as specified by the Soil Engineer's report.
1. Structures:
a. Compact the top 8" of sub-grade and each layer of fill material or backfill material at 98% of maximum density unless otherwise called out in the plans or soils report.
2. Lawn and unpaved areas:
a. Compact the top 8" of sub-grade at 85% of maximum density, all other layers of fill material or backfill material are to be 95% of maximum density. The top 8" of sub-grade in lawn areas is not to exceed 90% of maximum density.

3. Walks
a. Compact the top 8" of sub-grade and each layer of fill material or backfill material at 95% of maximum density unless otherwise called out in the plans or soils report.
4. Pavements:
a. Compact the top 8" of sub-grade and each layer of fill material or backfill material at 95% of maximum density unless otherwise called out in the plans or soils report.

C. Moisture control:
   1. Soil material that has been removed because it is too wet to permit compacting may be stockpiled or spread and allowed to dry. Assist drying by disking, harrowing or pulverizing until moisture content is reduced to a satisfactory value as determined by moisture-density relation tests approved by the Owner's Representative.

3.06 TREATED SUBGRADE

A. All parking lot pavement sub-grade shall be treated in accordance the plans and Engineers Soils Report.

3.07 FIELD QUALITY CONTROL

A. Secure Owner's Representative's inspection and approval of sub-grades and fill layers before subsequent construction is permitted thereon.
B. Provide at least the following tests to the approval of the Owner's Representative.
   1. At paved areas, a minimum of one field density test for every 7,500 square feet, but a minimum of three tests for all areas or as requested by the Owner's Representative. Testing to be paid for by the City.
   2. At lawn and unpaved areas, at least one field density test for every 20,000 square feet, but a minimum of three test for all areas or as requested by the Owner's Representative. Testing to be paid for by the City.
   3. Sub-grade shall be checked for stability even though it may meet the compaction requirements. The check for stability shall be proof rolling with a large roller or loaded dump truck and visual observation to insure that there is no pumping of the sub-grade.

C. If, in the Owner's Representative's opinion based on reports of the testing laboratory, sub-grade or fills which have been placed are below specified density, provide additional compacting and testing under the provisions of Section 01410 of these Specifications. Re-testing of areas that failed and have to be re-tested to be paid for by the contractor.

3.08 MAINTENANCE

A. Protection of newly graded areas:
   1. Protect newly graded areas from traffic and erosion and keep free from trash and weeds.
   2. Repair and reestablish grades in settled, eroded and rutted areas to the specified tolerances.

B. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, reshape and compact to the required density prior to further construction.

3.09 CERTIFICATION

A. Upon completion of this portion of the work and as a condition of its acceptance, deliver to the Owner's Representative a written report certifying that the compaction requirements have been obtained. State in the report the area or fill or embankment, the compaction density obtained and the type or classification of fill material placed.

END OF SECTION

SECTION 02265
FINISH GRADING

PART 1 GENERAL

1.01 WORK INCLUDED

A. Finish grade subsoil.

B. Place, level, and compact topsoil.

1.02 RELATED WORK

A. Section 02211 - Rough grading subsoil to site contours.

B. Section 03300 – Cast In Place Concrete

1.03 PROTECTION

A. Protect landscaping and other features remaining as final work.

B. Protect existing structures, fences, sidewalks, paving and curbs.

PART 2 PRODUCTS

2.01 MATERIALS

A. Topsoil: Imported, see Section 02220 – Excavating, Backfilling and Compaction; and 02934 – Sodding.

PART 3 EXECUTION

3.01 INSPECTION

A. Verify site conditions and note irregularities affecting work of this Section.

B. Beginning work of this Section means acceptance of existing conditions.

3.02 SUBSOIL PREPARATION

A. Eliminate uneven areas and low spots. Remove debris, roots, branches, and stones, in excess of ½ inch in size. Remove subsoil contaminated with petroleum products.

3.03 PLACING TOPSOIL

A. Place topsoil in areas where earth or no other building or paving is scheduled on the drawings.

B. Use topsoil in relatively dry state. Place during dry weather.

C. Fine grade topsoil eliminating rough or low areas. Maintain levels, profiles, and contours of subgrade.

D. Remove stone, roots, grass, weeds, debris, and foreign material while spreading.

E. Manually spread topsoil around trees, plants, building, and concrete curbs to prevent damage.

F. Remove surplus subsoil and topsoil from site.

G. Leave stockpile area and site clean and raked, ready to receive landscaping.

3.04 TOLERANCES

A. Top of Topsoil: Plus or minus 1/10 ft.

END OF SECTION

SECTION 02400
SITE DRAINAGE

PART 1 - GENERAL

1.01 DESCRIPTION

A. Provide site drainage as shown and specified. The work includes:
   1. Drainage structures and piping.
   2. Excavating and backfilling site drainage work.

B. Related work:
   Section 01510: Site Access.
   Section 02200: Earthwork

1.02 QUALITY ASSURANCE

A. Comply with Section 02000 Site Work requirements.

B. Materials and methods of construction shall comply with the following:
   1. Oklahoma Department of Transportation Standards and Specifications.
   2. American Society for Testing and Materials ASTM).
   3. American Association of State Highway and Transportation Officials (AASHTO).
   4. American Concrete Pipe Association (ACPA).

C. Excavating, backfilling and compacting operations: Comply with Section 02220 requirements and as specified.

D. Obtain acceptance of Owner's Representative of installed and tested site drainage system prior to installing backfill materials.

E. Identify all existing underground utilities and their location.

1.03 SUBMITTALS

A. Comply with Provisions of Section 01340.

B. Provide site drainage record drawings:
   1. Legibly mark drawings to record actual construction.
   2. Indicate horizontal and vertical locations, referenced to permanent surface improvements.
   3. Identify field changes of dimension and detail and changes made by Change Order.

C. Provide manufacturer's product data for each type of pipe material.

1.04 PROJECT CONDITIONS

A. Known underground and surface utility lines are indicated on the drawings.

B. Protect existing trees, plants, lawns and other features designated to remain as part of the landscape work.

C. Protect excavations by shoring, bracing, sheeting, underpinning or other methods as required to prevent cave-ins or loose dirt from entering excavations. Barricade open excavations and post warning lights at work adjacent to public streets and walks in accordance with OSHA requirements.

D. Underpin adjacent structure(s) including utility service lines which may be damaged by excavation operations.

E. Promptly repair damage to adjacent facilities caused by site drainage earthwork operations. Cost of repair at Contractor's expense.

F. Promptly notify the Owner's Representative of unexpected subsurface conditions.

PART 2 - PRODUCT

2.01 MATERIALS

A. Site drainage piping: Provide types and sizes indicated. Provide matching couplings, fittings and accessory components to ensure continuity of the site drainage system.
   1. Reinforced concrete pipe fittings: ASTM C76, Class IV pipe or of equal strength sufficient to attain D-load, 0.01" of 2,000 lbs. with ASTM C443 "O" ring seals or compression type rubber gasket joints. Sizes to 10" diameter may be non-reinforced with equivalent strength.
   2. Corrugated Polyethylene Tubing: ASTM F405 and F667. A product which meets this specification is ADS N-12 perforated corrugated polyethylene tubing by Advanced Drainage Systems, Inc., Columbus, Ohio or conform to AASHTO M252.

B. Trench drains, manholes, catch basins, inlets: Provide type and sizes indicated.
   1. Frames, grates and covers: ASTM A48 grey cast iron, asphalt coated.
   2. Concrete masonry units: ASTM C139.
   3. Brick: ASTM C32, grade MS.
   4. Precast concrete manhole barrels and cones: ASTM C478, 5" wall thickness with ASTM C443 "O" ring gasket joints.

5. Mortar:
   a. Mortar for jointing concrete pipe and for laying and parging concrete masonry:
      1 part Portland cement and 2 parts sand.
   b. Mortar for brickwork: 1 part Portland Cement, 1/2 part hydrated lime and 4-1/2 parts sand.

C. Fine granular fill: Clean natural sand.

D. Course granular fill: ¾" crushed limestone.

E. Concrete: 3,000 psi air entrained concrete complying with requirements of Section 03300 Cast-In-Place Concrete.

F. Earth fill: Natural sandy-clay subsoil, soil-rock mixtures, or approved excavated materials, free of foreign matter, organic material and debris.
   1. Excavated materials removed in site drainage trenching operation may be used as backfill when acceptable to the Owner's Representative.

G. Soil separator: Rot resistant polypropylene filter fabric, permeable and unaffected by freezing and thawing.

PART 3 - EXECUTION

3.01 DESCRIPTION

A. Lay out site drainage work and establish extent of excavation by area and elevation. Designate and identify datum elevation and project engineering reference points. Set required lines, levels and elevations.

B. Do not cover or enclose work of this Section before obtaining required inspections, tests, approvals and location recording.

C. Remove existing paving, including base material, as required to accommodate site drainage work. Saw cut existing paving to provide uniform straight transition at intersection of new to existing paving.

3.02 EXISTING UTILITIES

A. Conform to Section 02000 Site Work.

3.03 INSTALLATION

A. Perform excavating and backfilling as required to install site drainage work.

B. Provide trench wall support and pumping of surface and ground water as required to provide suitable conditions.

C. Excavate trenches to accommodate indicated bedding conditions and material. Trim and shape trench bottoms to proper line and grade, free of irregularities. Remove unstable material and replace with compacted fill.

D. Install site drainage system true to grade and alignment indicated.
   1. Provide necessary equipment for lowering pipe safely into trenches. Handle pipe and accessories to prevent damage. Damaged materials replaced at Contractor's expense.
   2. Do not place pipe in water, nor when trench or weather is unsuitable for site drainage.
   3. Remove all dirt and foreign material from pipe before installation. Provide bulkheads as required to prevent entrance of dirt or water after installation.
   4. Lay and fit pipe sections to provide a smooth, uniform invert, with sealed joints and full bearing in bedding material. Provide continuous fall in flow direction.
   5. Excavate bell holes under each bell to ensure uniform bedding for all types of bell and spigot piping.
   6. Install pipe joint gaskets in accordance with manufacturer's instructions. Install concrete pipe in accordance with ACPA "Concrete Pipe Field Manual".
   7. Cut pipe ends entering structures flush with inner face of structures.
   8. Provide soil separator over granular backfill at perforated site drainage piping.
   9. Extend site drainage system to outfall indicated and make required connection.
   10. Obtain required inspections and perform testing prior to backfilling. Remove obstructions, replace damaged components and retest as required. Provide a satisfactory free flowing drainage system.
   11. Sub-drain pipe installation: Conform to AASHTO M252-851.

E. Backfill trenches with an approved backfill material, free from large clods, stones and debris.
   1. Backfill trenches in 8" compacted layers until there is a cover of not less than 24" over piping. Place remaining backfill material in 12" compacted layers.
   2. Backfill evenly on both sides of piping for full depth. Provide thorough compaction of fill under pipe haunches.
   3. Provide granular backfill at all paved areas.
   4. Provide concrete encasement where indicated.

F. Mechanically compact backfill. Water settling, puddling and jetting as a compaction method are not acceptable.

G. Fill, compact and restore to original level and condition all settlement.

H. Replace paving, lawns and finished surfaces removed to accommodate the site drainage system, except where new surfaces are provided as part of the work.

I. Construct trench drains, catch basins, manholes, inlets and other drainage structures as indicated.
   1. Install drainage structures on a sound cast-in-place or pre-cast segmented concrete base.
   2. Lay radial and batter concrete masonry with full mortar joints completely filled with Portland cement mortar. Strike joints flush with surface of concrete masonry.
   3. Horizontal joints shall not exceed 1/2". Vertical joints shall not exceed 1/4" on their interior surface.
   4. Provide headers where required to adjust frames to grade, breaking joints between courses.
   5. Parge inside and outside face of masonry structure walls with 1/4" mortar.
   6. Construct flow channels with concrete or brick conforming to the inside diameter of connecting lines. Make changes in grade gradually and make changes in line with true curves.
   7. Set frames and covers to required grade and bed in place with mortar.
   8. Cold weather protection: Provide all necessary means for heating concrete, masonry materials and mortar to protect concrete and masonry work during and after installation from damaged by frost and freezing.
   9. Perform no work when the temperature is below 25 degrees F. (ambient).

3.04 DISPOSAL OF WASTE MATERIALS

A. Transport excess excavated materials, including rock, to designated disposal area on Owner's property. Stockpile or spread as directed. Remove from site and legally dispose of trash and debris.

3.05 CLEANING

A. Maintain site drainage piping and structures in workable condition during construction operations.

B. Flush site drainage system with water in sufficient volume to obtain free flow through each line. Remove all silt, trash and debris just prior to acceptance of work.

C. Upon completion of site drainage work, remove tools and equipment. Provide site clear, clean, free of debris and suitable for site work operations.

END OF SECTION

SECTION 02800
PLAYGROUND EQUIPMENT

PART 1 -- GENERAL

1.01 DESCRIPTION

A. Provide and install play equipment as shown on the schematic drawings and as specified herein, complete in place, tested and approved, including but not limited to:
   (1) Playground equipment
   (2) Concrete footings

1.02 QUALITY ASSURANCE

A. All playground equipment, safety surfacing and installation of equipment and safety surfacing shall be manufactured to conform to the guidelines of the most recent U.S. Consumers Product Safety Commission Guidelines and ASTM F1487 Standard for playground safety and accessibility.

B. Manufacturers shall provide an insurance certificate on both product and General liability of not less than one million dollars. The issuing underwriter Insurer shall have a current Best's Key Rating Guide Policyholders Rating of "A" or above, and Best's Financial Size Group must be indicated. The Manufacturer's Insurer shall comply with the general laws and duly constituted authorities of the State of Oklahoma. Proof of Insurance Certificates shall be submitted with playground equipment submittals prior to purchase and installation of equipment.

C. Manufacturers shall provide a minimum one-year warranty from the date of final acceptance on materials and workmanship, with an additional ten-year warranty on post and deck integrity.

D. The General Contractor shall be required to provide a Warranty Validation Certificate made out to the Owner from the Manufacturer of both the playground equipment and the safety surfacing which states the installation of all playground equipment and safety surfacing meets or exceeds the most recent Consumer Products Safety Commission's (CPSC) Playground Equipment Guidelines and ASTM F1487, Safety and Accessibility Standard.

E. All playground equipment shall be constructed to meet or exceed the most recent U.S. Consumer Products Safety Commission Guidelines and ASTM standards for protrusions. All nuts and bolts shall be recessed.

B. Manufacturer shall provide maintenance schedule and estimate the frequency with which inspection and maintenance should be performed.

G. Installer's Qualifications:

1. The playground equipment and safety surface installation shall be done by a Manufacturer's Certified installer or workmen supervised by a representative of the playground equipment manufacturer. See 1.02 (D) for certification requirements for installation. Equipment will not be accepted without certification being submitted prior to request for acceptance by General Contractor.

2. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the requirements and the methods needed for proper performance of the work of this section.

1.03 SUBMITTALS

A. Prior to installation, submit manufacturer's installation instructions.

B. Prior to installation, submit manufacturer's checklist for site verification that equipment is installed in accordance with manufacturer's requirements.

C. Prior to ordering equipment, submit manufacturer's plan view drawing of the equipment with the manufacturer's recommendations for depth of surfacing for each event and the minimum fall zone for all play components or systems. All playground equipment, components, swings, spring animals and free-standing climbers or other incidental equipment shall be shown to scale and must fit within the area shown on the drawings including ASTM fall zones and the perimeter clear zone. Modifications to the playground during installation to make the equipment fit into the concrete border will be at the expense of the contractor. **The playground layout submittal of the equipment, as it fits in the designed perimeter border, must be approved by the Landscape Architect and City prior to any sitework beginning.**

D. After installation, submit touch-up paint of each color specified. Color of materials to be selected by Parks and Recreation Department from those available from the Manufacturer.

PART 2-- PRODUCTS

2.01 MATERIALS

METAL EQUIPMENT

A. Deck support posts shall be of 5" O.D. round posts constructed from galvanized steel, powder coated at the factory. They shall have caps that are factory installed and secured. All steel pipe shall be hot dipped in zinc for a

uniform galvanizing. The interior of pipes shall be sprayed with a zinc-rich cold galvanizing compound or otherwise treated with a galvanizing process. The components shall be free of excess weld splatter and shall be cleaned in a three-bath system which shall include a rust-inhibitive iron phosphate wash prior to painting.

B. All steel components (excluding slides) shall be painted with an electrostatically applied polyester powder coating which shall be cured at temperatures between 400 and 500 degrees Fahrenheit.

C. Decks shall be constructed from steel plate, coated with a U.V. stabilized, poly-vinyl-chloride and oven cured coating. Center dimension of deck width shall not be less than 46 inches.

D. All platform protective barriers and safety rails shall be made of vertical metal tubing. Plastic Panels must be approved by Representatives of the Parks and Recreation Department.

E. All slides shall be plastic (see below for description). Owner will allow the spiral slide to be proposed as a steel slide beds. If proposed, they shall be constructed of 16 gauge reinforced stainless steel with more than one part being connected with lap joints. The orientation of the slide shall not be facing south in any manner. **All tunnel slides shall be 30 inch diameter or larger.**

F. Chains may be used in playground components, climbers, tire swings or belt swings. All chain used in playground components shall be 5/0 steel welded links, with no vinyl coating.

G. All moving joints shall be constructed using bearings. Metal-to-metal "S" hooks are not acceptable.

H. Belt swings shall be made of heavy molded rubber with metal insert and reinforcing metal cables.

I. Posts, decks or other components made of wood are not acceptable.

J. The deck heights shown on the drawings are schematic. Final heights may vary slightly according to manufacturer. However, the separation between decks shall be 8 inches or less (unless otherwise shown) and must provide a kick barrier to meet current CPSC and ASTM F-1487 standards for entrapment.

K. All spring play events shown on plans shall be constructed of aluminum.

PLASTIC EQUIPMENT

A. All rotationally molded plastic parts shall be molded of a linear low density polyethylene that is U.V. and color stabilized. Wall thickness may vary by product from .187"(3/16") to .312" (5/16"). Rotationally molded products shall meet or exceed tensile strength of 2200 psi.

B. Plastic slides are to be constructed of rotationally molded polyethylene with ultraviolet (UV) light stabilizers with the color molded in. All dimensions for slide sides, exits, and protrusions shall meet, or exceed, CPSC and ASTM F-1487 guidelines.

KNOWN ACCEPTABLE PLAYGROUND EQUIPMENT :
A. See Construction Drawings

C. Other playground equipment manufacturers may be considered if they meet the basic specification as described above. Contractor must submit manufacturers' product data a minimum of 7 days prior to the bid date to be considered as meeting the intent of the specifications. See "Instruction to Bidders", Section 3.3, or contact City Engineer's Office for substitutions.

PART 3-- EXECUTION

3.01 INSPECTION

A. Verify gradients and elevations of sub-base, base, curbs and drainage are correct

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B. Beginning of installation means acceptance of sub-base, curbs and drainage by City. **The playground equipment for each location shall be completely installed with safety surface placed, within 20 working days, once installation begins, barring weather delays.**

3.02 INSTALLATION

A. Install play equipment with a minimum setback of seven feet from the edge of playground surfacing material. Install higher and moving equipment with setbacks per manufacturer's recommendations and the most recent U.S. Consumer Products Safety Commission guidelines.

B. Tops of playground footings shall be smooth with a radius where the top transitions to the sides of the footing. Footings shall be covered with the same depth of playground surfacing material as the rest of the play area.

C. Playground equipment shall have light colored grab bars located at corners or positioned to help children enter a new play area or event. Grab bars shall be provided at every transfer point.

D. Play equipment shall be configured so that children with hearing or visual disabilities can see potential hazards and other children playing on the equipment. Any change from the playground layout concept provided in the details shall be submitted and approved by the City Parks and Recreation Department.

E. Playground materials and construction shall conform to the most current U.S. Consumer Products Safety Commission Guidelines and ASTM F1487 Safety and Accessibility Standard. Surface material must meet the peak deceleration requirements in accordance with procedures described in ASTM F1292 " A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment".

F. In the event the play equipment and the playground surfacing materials are not installed and completed on the same day, the play equipment shall be barricaded and signed sufficiently to prevent play, or access by the public, until the playground surfacing materials are completely installed. Acceptable fence includes T-posts with four-foot height orange snow fence attached completely encircling play area.

G. Contractor is responsible for receiving, storing and protecting play equipment as it is delivered from the manufacturer. Mistakes in shipping shall be remedied by the Contractor prior to installation. Equipment damaged or improperly stored at the site during installation is the responsibility of the Contractor. Contractor shall be responsible for replacing damaged equipment vandalized during installation.

H. The play area subbase shall have positive drainage to the underdrain and to accommodate the specific site grading. Decks shall be level and uprights plumb. No equipment will be accepted if improperly installed.

I. Playground Equipment (decks, slides, climbers, uprights, ramps, etc.) installed incorrectly or at improper heights (according to the submittals) shall be reinstalled at the Contractor’s expense. The heights shall be based on the approved submittals with the finish grade of the safety surface two inches below the level of the perimeter border (see plan details). Slide exits shall meet the manufacturer’s requirements for clearance and be based upon the finish grade of the safety surface in relation to the border.

3.03 REPLACEMENTS

A. In the event equipment delivered to the site is damaged or improperly installed, the Contractor shall be responsible for replacing such equipment to the satisfaction of the City Engineer at no additional cost to the City.

B. Contractor is responsible, during installation, for providing temporary safety fencing around playground equipment components, climbers, etc. sufficient to keep children from playing on unfinished or unsecured play equipment. Partially installed equipment scarred or damaged due to lack of protection during installation will be replaced to the manufacturers' requirements at the expense of the Contractor with no additional expense to the City.

END OF SECTION

SECTION 02806
POURED IN PLACE PLAYGROUND SURFACE MATERIAL

PART 1 -GENERAL

1.01 DESCRIPTION

A. Provide and install rubber playground surfacing material as shown on the Drawings and as specified herein, complete in place, tested and approved, including but not limited to:
   (1) poured-in-place playground surface
   (2) cast-in-place concrete
   (3) playground equipment

1.02 RELATED WORK:

Section 02220:	Earthwork.
Section 02800:	Playground Equipment
Section 02805:	Playground Surfacing.
Section 03300:	Cast-in-place Concrete

1.03 QUALITY ASSURANCE

A. Manufacturers shall be required to provide a Manufacturer's Certificate of Compliance with the most recent Consumer Products Safety Commission's Playground Equipment Guidelines, in accordance with Procedure C of ASTM F-355, 'Shock Absorbing Properties of Play Surface Systems and Materials'. Playground surfacing materials and construction shall conform to the most current U.S. Consumer Products Safety Commission Guidelines and ASTM F1487 Safety and Accessibility Standard. Surface material must meet the peak deceleration requirements of the CPSC Guidelines in accordance with procedures described in ASTM F1292 "A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.' Manufacturer shall provide proof of Product Liability Insurance of at least one million dollars.

B. Installer’s Qualifications:

(1.) Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts, and who are completely familiar with the requirements and the methods needed from proper performance of the work of this section.

1.04 SUBMITTALS

A. Contractor shall submit the following samples, certificates or test results prior to use on the project.
   1. Product data on rubber surface.
   2. Product data on binder.
   3. Product data on primer.

B. Other manufacturer's may be considered if they meet the basic specification as described in this section. Contractor must submit manufacturers' product data and product sample to the Parks and Recreation Department a minimum of 7 days prior to bid date to be considered as meeting the intent of the specifications.

PART 2 – PRODUCTS

A.01 MATERIALS

A. Color of base mat to be black and color of top surface to be indicated by Parks and Recreation Department plans during submittal stage of project. The top surface, shall be a maximum of 25% black unless otherwise approved by the Landscpae Architect.

B. Warranty, Two(minimum) year warranty from manufacturer.

C. Concrete shall conform to Section 03300, Cast-in-Place Concrete (3500 psi).

PART 3 – EXECUTION

3.01 INSPECTION

A. Verify that gradients and elevations of sub-base are correct. Subgrade shall provide a 2% slope in the direction indicated on the plans.

B. Verify that the Concrete base has been allowed to cure a minimum of 28 days prior to applying the poured-in-place surfacing.

C. Beginning of installation means acceptance of sub-base.

3.02 INSTALLATION

A. Stake layout for concrete base. This shall occur after the installation of the play structure. If adjustments in the layout are required as a result of the play structure location, notify owner prior to installation.

B. Refer to Section 03100 Cast-in-Place Concrete for construction methods of the base. Pavement shall be width and extent shown on the plans.

C. All joints that occur under Pour-in-Place surfacing shall not be edged.

D. At the expansion joints, trim preformed expansion joint filter with sharp chisel ¼" below the concrete surface.

E. Install Poured-in-Place resilient surface as per manufacturer's instructions and to the patterns, colors and dimensions shown on the plans.

F. Contractor shall place temporary barricades and fencing to prevent the public from using the play equipment while the concrete pavement is curing. The contractor shall inspect the barricades and fences daily to ensure they are not damaged or altered by the public and shall be adjusted by the contractor as needed.

END OF SECTION

SECTION 02870
SITE FURNISHINGS

PART I - GENERAL

1.01 DESCRIPTION

A. Work Included: Provide site furnishings where shown on Drawings, as specified herein, and as needed for a complete and proper installation of the following:

1. Park Benches
2. Picnic Tables
3. Trash Receptacles
4. Bike Racks

B. Related work:
Section 03300: Cast-in-Place Concrete.

1.02 QUALITY ASSURANCE

A. Set items in a timely manner in accordance with Manufacturer's recommendations.

B. PVC coating material shall be of the highest grade resin coating with plasticizers and stabilizers added to insure resistance to fading and shall be thermally fused and adhered to a primer that is thermally cured onto galvanized steel. Vinyl properties, when applied at 250 mils, shall be as follows:

1. Specific Gravity	ASTM-D792	1.30 Max. +/-.03
2. Hardness Durometer	ASTM-D676	A90 +/- *5*
3. Tensile Strength	ASTM-D412	2600 +/- 5%
4. Ultimate Elongation	ASTM-412	275% +/- *5%*
5. Dielectric Strength	ASTM-D149	750
6. Compress & Cut through Lbs.	Bell Labs	1500
7. Accelerated Aging Test	ASTM-D1499	1500 Hrs @ 145° F

No degradation of PVC powder when exposed to 500,000 langleys of ultraviolet exposure time using a fresenel-reflecting concentration employed in the EMMAQUA test method in accordance with ASTM-E838, ASTM-D4364 and ASTM-D4141.

In addition to the above, the PVC material shall be impervious to the following alkalies, acids and oils: Sulfuric acid, hydrochloric acid, citric acid, sodium hydroxide, petroleum, mineral and synthetic urine.

1.03 SUBMITTALS

A. Comply with provisions of Section 01340.
B. Samples:

Accompanying the Shop Drawings, submit samples of all finishes including actual materials on suitable substrates for true representation of color and textures of products called out under this Section.

1.04 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to the site in Manufacturer's original, unopened packaging.

B Components should be covered or otherwise protected to prevent any use until after final inspection.

PART 2 - PRODUCTS

2.01 PICNIC TABLES

A. Vinyl Clad Picnic Table (6'0"): Overall size to be 59-1/4" wide x 29" high x 6 ft. long. Seat height above ground to be 17". Table top width to be 29". Picnic table leg frame shall be fabricated from 2-3/8" O.D. iron pipe and shall be electrically welded into a one piece end frame. Frame shall be walk-through design. All bends are to be on a 4-13/16" inside radius. No pipe or metal parts shall extend past the outside edge of the seat. All table top and seat mounting brackets shall be fabricated from 3/16" x 6" steel plate bent at 90 degrees to form a 4" x 2"angle. All table top and seat mounting brackets shall be precision punched. For safety, all mounting brackets shall be rounded to a l 1/2" radius on all comers of surfaces in a vertical plane. Cross braces shall consist of 1-5/16" O. D. galvanized iron pipe with ends flattened, punched and rounded to a 1-1/2" radius.

Frame shall be finished with a dry polyester powder, baked to a high gloss finish. Seats and tops shall be fabricated on 9 GA unflattened, expanded galvanized steel sheets. Framing for seats and tops shall consist of 10 GA angle steel, electrically welded to the expanded steel sheet. Seats and tops shall be coated with polyvinyl chloride to a thickness of no less than 1/8", oven cured for a durable, easily cleaned finish. Manufacturer and model as called out on plans. Color to be selected from Manufacturer's standard colors as directed by Owner's Representative.

B. Handicap Accessible Vinyl Clad Picnic Table (8'-O'): Overall size to be 59-1/4" wide x 29" high x 8 ft. long, benches 6 ft. long. All other specifications equal to paragraph 2.01 A. Manufacturer and model as called out on plans. Color to be selected from Manufacturer's standard colors as directed by Owner's Representative.

C. Single Pedestal Four Seat Picnic Table: Overall size shall be 30" high x 76" square. Table top, 46" square. Seat height shall be 18". Pedestal column shall consist of one 4" x 4" x 1/4" wall x 48" square steel tubing. All bench and table supports, made from 2-1/2" square steel tubing and 2-1/2" x 3" x 3/6" angle, shall be electrically welded in horizontal components and shall also be electrically welded together with vertical column into a one piece unit. For safety, all mounting brackets shall be rounded on a 1-1/2" radius on all corners of surfaces in a vertical plane.

Finish for the frame shall be a high gloss black finish. Seats and tops shall be fabricated of 9 GA unflattened, expanded galvanized steel sheets. Framing for seats and tops shall consist of 10 GA angle steel, electrically welded to the expanded steel sheet. Seats and tops shall be coated with polyvinyl chloride to a thickness of not less than 1/8", oven cured for a durable, easily cleaned finish. Manufacturer and model as called out on plans. Color for seats and tops to be selected from Manufacturer's standard colors as directed by Owner's Representative.

D. Acceptable Manufacturers:
   1. Refer to Construction Drawings for Specified Products

2.02 LITTER RECEPTACLES

A. 32 gallon, 30" high x 24" diameter receptacle and accessories. Manufacturer and model as called out on plans. Color to be selected from Manufacturer's standard colors as directed by Owner's Representative.

2.03 GRILLS

A. No grills to be used for this project.

2.04 BENCHES

A. Park Benches: As called out on the drawings. Average seat height above ground shall be 18" (unless designated otherwise on the drawings). All frame components shall be electrically welded together such that sharp corners and edges are eliminated. Seats and backs shall be 3/4" x 9 gauge un-flattened expanded galvanized steel and shall be coated with polyvinyl chloride to a thickness of no less than 1/8", oven cured for a durable, easily cleaned finish (in accordance with Section 02870) (unless designated otherwise on the drawings). Frame finish shall be electrostatically applied dry polyester powder, baked to a high gloss finish. Single benches o are to be in ground mounted as shown on the drawings. Manufacturer and model as called out on plans. Color to be selected from Manufacturer's standard colors as directed by Owner's Representative.

B. Acceptable Manufacturer's:
   1. Refer to Construction Drawings for Specified Products

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Connect conditions detrimental to timely and proper execution of the work. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

A. Coordinate as required with other trades to assume proper interface with the work of this Section.

B. Install the work of this Section in strict accordance with the design, approved shop drawings and the Manufacturer's recommendations,

C. Upon completion of the installation, touch-up all scratches and abrasions to be completely invisible to the unaided eye from a distance of five feet.

END OF SECTION

SECTION 02900
PLANTING

1.01 SCOPE:

A. Perform all work required to complete the planting as described herein and shown on accompanying drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

A. General Conditions
B. General Requirements - Division 1

1.03 REFERENCE STANDARDS:

A. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standard Plant Names.

B. American Standard for Nursery Stock (ANSI 260), latest edition, American Association of Nurserymen.

1.04 QUALITY ASSURANCE:

A. All work shall be performed by skilled personnel within the industry in a workmanlike manner and supervised by an experienced foreman.

B. The contractor, when required, will submit samples of all trees, for the Landscape Architect and/or Owners approval. When approved, these will be tagged and maintained as representative samples for all future plant materials. Rejected material shall be removed from the site immediately. The Landscape Architect reserves the right to reject any material he deems unsatisfactory.

C. When required, the contractor shall also submit for approval sufficient quantities of loam, manure, peat moss and fertilizer as to be representative. All samples must be approved by the Landscape Architect before use in the job.

1.05 DELIVERY, STORAGE, AND HANDLING:

A. Deliver all packaged material in original unopened and undamaged containers bearing manufacturer's label identifying name, weight, analysis and any other pertinent data.

B. Protect plant material during delivery to prevent damage to root ball and desecration of leaves. Damaged material will be rejected.

1.06 WARRANTY PERIOD AND REPLACEMENT:

A. All trees and shrubs shall be warranted for one (1) years after Final Acceptance. Plants shall be in full leaf for a minimum of 30 days at the end of the warranty period. Termination of the warranty period will be extended as necessary to comply.

B. Plants used for replacement shall be of the same kind and size as those originally specified. All work, including materials, labor and equipment used in replacements, shall be at no cost to the owner. Any damage, including ruts in lawn or bed areas, incurred in making replacements, shall be immediately repaired.

C. Plant material will be replaced once at the owners request and at the end of the twelfth (12th) month. A list of material to be replaced shall be submitted to the Landscape Architect and/or Owner prior to any replacements being made.

1.07 ACCEPTANCE:

A. Substantial completion and contract close-out shall be in accordance with Division 1.

B. Final acceptance shall be when the contractor has completed to the Landscape Architect's satisfaction, the final punch list.

1.08 MAINTENANCE:

A. The contractor shall maintain all plant materials under this contract by watering, cultivating, weeding, spraying and replacing as necessary to keep plants in a vigorous, healthy condition until final acceptance.

PART II PRODUCTS

2.01 MATERIAL:

A. Plants (general): All plants shall be well-formed No. 1 grade or better nursery stock and shall meet the applicable standards noted herein for nursery stock and shall be subject to rejection by the Landscape Architect. All plants shall remain the property of the contractor until final acceptance.

B. Ornamental trees: Plants shall be healthy, vigorous, bushy, well-branched, of normal habit of growth for the species, and shall be free from disease, insect eggs and larvae. The specified sizes shall be before pruning, and the plants shall be measured with their branches in normal position.

C. Shade trees: Shall be healthy, vigorous, full-branches, well-shaped, and shall meet trunk diameter and height requirements of the plant list. Balls shall be

firm, neat, slightly tapered and well burlapped. Any tree loose in the ball or with broken ball at the time of planting will be rejected. Any trees are subject to approval by the Landscape Architect.

D. Topsoil: Where additional topsoil is needed, it shall be fertile, sandy loam of natural occurrence, free of rubble, stones, lumps and perennial plant root stocks. The presence of noxious weeds will be cause for rejection.

E. Mulch: Shredded cedar bark.

F. Compost: Back to Nature, composed cotton seed hulls with iron sulfate as manufactured by Back to Nature Resources, Inc., Dallas, Texas, or approved equal.

G. Fertilizer: Osmocote 18-6-12, or approved equal. To be paid as part of the installed plant cost.

H. Steel bed Edging: Ryerson Steel Bed Edging, 3/16" x 4" steel landscape edging with steel stakes as manufactured by Joseph Ryerson, Dallas, Texas.

2.02 ACCESSORIES:

A. Tree Wrap: Not used on this project.

B. Tree Stakes: Split tee metal fence post, green.

C. Wire, eye bolts: Non corrosive of sufficient strength.

D. Straps for staking: 2” Flexible Tree Strap

PART III EXECUTION

3.01 PREPARATION:

A. Verify grades and conditions prior to accepting any portion of the site from general contractor before commencing with work. Beginning work under this section indicates acceptance of existing site conditions.

B. All planting beds should have a minimum of 6" of amended topsoil.

C. Outline all planting beds for approval by the Landscape Architect. Prior to commencing with bed preparation.

D. Stake all tree locations for approval by the Landscape Architect prior to digging tree pits.

E. Remove all weeds and grasses from planting beds. If Bermuda grass is present,
it shall be eradicated by approved means.

F. Within approved bed lines prepare soil by roto-tilling two inches (2") of compost over entire bed area to a depth of six inches (6").

G. Azaleas and rhododendron shall be planted in 100% pure sphagnum peat moss. Place peat moss to a height of 4" above surrounding bed grade, (12" total depth).
1. Excavate entire area to be planted to a depth of 8" and backfill with peat
2. Peat moss shall be thoroughly wetted with water prior to planting.
3. Scarify root balls so plants will not become root bound.

H. Position plants and groundcover on prepared beds prior to planting for approval of Landscape Architect.

3.02 INSTALLATION:

A. Plant in Landscape Architect's approved location, setting plant with top of ball even with top of bed, and compact soil carefully around each plant ball. Water each plant thoroughly with hose to eliminate air pockets. Plants shall be carefully pruned to remove dead or broken branches, and entire bed area shall be hand raked to a smooth, even surface.

B. Spread an even 2" layer of mulch over entire planting bed.

C. Shade Trees: Will be planted in tree pits twenty four inches (24") greater in diameter than the size of the ball or root system. Scarify sides and slope pit bottom.

D. Ornamental Trees: Will be planted in tree pits eighteen inches (18") greater in diameter than the size of the ball or root system. Scarify sides and slope pit bottom.

E. All trees are to be set so that top of ball is even with finish grade or if poor soil conditions and with the architect’s approval 1/4 of the root ball above finish grade.

F. On all trees the top 6" of backfill shall consist of a 1:1 mixture of compost to soil.

G. On all trees thoroughly water to eliminate air pocket and future settling.

H. Around all trees form a circular ring free of any vegetation. For trees 3" and greater in caliper form a 5' diameter ring and for trees less than 3" caliper form a 3'-6" diameter ring. Circle shall be true in form and centered on tree.

I. Cut all strings and wires, etc. from around the top of the root balls and tree trunks.

J. Spread an even 2" layer of mulch within all tree rings.

K. Prune all trees after planting to remove dead and broken branches.

L. All trees shall be staked with two (2) metal split tee green fence posts and tied north and south with wire through tree straps.

M. Apply Osmocote at a rate of 1/2 pound per tree and as per the manufacture's Recommendations for all shrub and groundcover planting beds.

3.03 CLEANING:

A. During the work, the premises are to be kept neat and orderly at all times. Storage areas for planting and other materials shall be organized so that they, too, are neat and orderly. All trash, including debris from removing weeds or rocks from planting areas, preparing beds, or planting plants, shall be removed from the site daily as the work progresses. All walk and driveway areas shall be kept clean by sweeping or hosing.

END OF SECTION

SECTION 02934
SODDING

PART 1 - GENERAL

1.01 SCOPE:

A. Provide and install sodded lawns as indicated on drawings and specified herein.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

A. General Requirements

1.03 QUALITY ASSURANCE:

A. Comply with American Sod Producers Association (ASPA) guideline specifications to sodding.

1.04 DELIVERY, STORAGE AND HANDLING:

A. Deliver sod on pallets and protect from sun, wind and dehydration prior to installation.

B. Do not cut or deliver more sod than can be laid within 24 hours.

1.05 SUBMITTALS:

A. Submit name, address and phone number of sod supplier.

B. Manufacturer's label with analysis data on lawn fertilizer.

1.06 MAINTENANCE:

A. Maintain sod after installation to achieve a well rooted and vigorous growing lawn or until final acceptance, whichever is longer. If sodded areas need to be mowed during construction operations, this is the responsibility of the contractor.

PART 2 - PRODUCTS

2.01 MATERIAL:

A. Sod shall be U-3 Bermuda (Cynodon dactylon "U-3") or of type as indicated on drawings and shall be well rooted, healthy, free of weeds, disease, nematodes, and soil borne insects. Sod shall also be uniform in color, leaf texture, and density.

B. Fertilizer shall be granular or pellet 13-13-13 or as determined by soil testing.

C. Water shall be free of substances harmful to sod growth.

PART 3 - EXECUTION

3.01 INSPECTION

A. Examine finish surfaces, grades, topsoil quality and depth. Do not start sodding work until unsatisfactory conditions are corrected. Beginning of installation indicates acceptance of existing site conditions.

3.02 PREPARATION:

A. Loosen topsoil of lawn areas to be planted. Remove existing vegetation, sticks, roots, rubbish, foreign matter and stones over one inch (1") in any dimension from the top two inches (2") of the sod bed. Areas where the finish grade has sat for extended periods of time will need to be tilled or disked to remove vegetation and to loosen compacted soil to 85% maximum density.

B. Fine grade lawn areas to smooth, even surface with a loose, uniformly fine texture. Float smooth to remove ridges and fill depressions as required to drain.

C. Finish grade shall be smooth and approximately one inch (1") below curbs, walks and other paved surfaces.

D. Apply fertilizer on finish grade prior to sod installation at a rate of one (1) pound of actual nitrogen per 1000 square feet.

E. Restore prepared areas to specified condition if eroded, settled, or otherwise disturbed after fine grading and prior to sodding.

3.03 SOD INSTALLATION:

A. Work within seasonal limitations of the sod type specified. Install sod between April 15 and August 30. Deviation from these dates shall be submitted by the contractor for approval by the owner or the owner’s representative before installation.

B. Large roll sod will be allowed only if netting is removed during the installation of the sod. All sod netting is to be removed on any size sod rolls.

C. Lay sod to form a solid mass tightly-fitted joints. Do not overlay edges. Stagger strips to offset joints in adjacent courses.

D. Sod shall be placed so that top of sod is flush with adjoining grass areas if any, curbs, walks, and other paved surfaces.

E. Do not install sod on saturated or frozen soil.

F. Water sod lightly then roll with a water filled commercial lawn roller to ensure contact with subgrade and to insure a smooth surface free of lumps and depressions.

G. Immediately following rolling, water sod thoroughly and continue to water after installation to achieve a well rooted and vigorous growing lawn or until final acceptance, whichever is longer. Contractor to provide watering equipment as required for areas not covered by an irrigation system.

H. Repeat sod rolling as needed after one week to achieve a smooth level surface.

I. On 3:1 slopes or greater sod shall be secured with sod staples as needed to prevent sod from sloughing off slopes.

J. Replace dead sod as required prior to final acceptance.

3.04 CLEANING:

A. During the work, the premises are to be kept neat and orderly at all times. Storage areas for materials shall be organized so that they are neat and orderly. All trash, including debris from removing weeds or rocks from sodded areas, shall be removed from the site daily as the work progresses. All walk and driveway areas shall be kept clean by sweeping or hosing.

END OF SECTION

SECTION 03100
CONCRETE FORMWORK

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Provide formwork in accordance with provisions of this Section for cast-in-place concrete shown on the drawings or required by other Sections of these Specifications.

B. Related work:
Section 03210: Steel Reinforcement
Section 03300: Cast-in-place Concrete

1.02 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B. Design of formwork is the Contractor's responsibility.

C. Standards: in addition to complying with pertinent regulations of governmental agencies having jurisdiction, comply with pertinent provisions of ACI 347.

1.03 SUBMITTALS

A. Comply with pertinent provisions of Section 01340.

B. Product data: After the Contractor has received the Owner's Notice to Proceed, submit manufacturer's data and installation instructions for proprietary materials including form coatings, ties, and accessories, and manufactured form systems if used.

PART 2 PRODUCTS

2.01 FORM MATERIALS

A. Except for metal forms, use new materials. Materials may be reused during progress of the work, provided they are completely cleaned and reconditioned, re-coated for each use, and capable of producing formwork of the required quality.

B. For footings and foundations, use boards or planks secured to wood or steel stakes, substantially constructed to shapes indicated and to support the required loads.

2.02 FORM TIES

A. Hold inner and outer forms for vertical concrete together with combination steel ties and spreaders approved by the Owner's Representative:
   1. Space ties symmetrically in tiers and rows, each tier plumb from top to bottom and each row level.
   2. At horizontal pour lines, locate ties not more than 6" below the pour lines. Tighten after concrete has set and before the next pour is made.
   3. For exposed concrete surfaces, provide form ties of removable type with the bolts equipped with permanent plugs and a system approved by the Owner's Representative for fixing the plugs in place.

2.03 DESIGN OF FORMWORK

A. General:
   1. Design, erect, support, brace, and maintain formwork so it will safely support vertical and lateral loads that might be applied, until such loads can be supported by the concrete structure.
   2. Carry vertical and lateral loads to ground by formwork system and in-place construction that has attained adequate strength for that purpose.
   3. Construct formwork so concrete members and structures are of correct size, shape, alignment, elevation, and position.
   4. Design forms and formwork to include assumed values of live load, dead load, weight of moving equipment operated on the formwork, concrete mix, height of concrete drop, vibrator frequency, ambient temperature, foundation pressures, stresses, lateral stability, and other factors pertinent to safety of the structure during construction.
   5. Provide trussed supports when adequate foundations for shores and struts cannot be secured.
   6. Support form materials by structural members spaced sufficiently close to prevent objectionable deflection.
   7. Fit forms placed in successive units for continuous surfaces to accurate alignment, free from irregularities, and within the allowable tolerances.
   8. Provide formwork sufficiently tight to prevent leakage of cement paste during concrete placement. Solidly butt joints, and provide backup material at joints as required to prevent leakage and prevent fins.
   9. Provide camber in formwork as required for anticipated deflections due to weight and pressure of fresh concrete and construction loads.

2.04 EARTH FORMS

A. Side forms for footings may be omitted, and concrete may be placed directly against excavation only when requested by the Contractor and approved by the Owner's Representative.

B. When omission of forms is accepted, provide additional concrete 1" on each side of the minimum design profiles and dimensions shown on the drawings.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.02 FORM CONSTRUCTION

A. General:
   1. Construct forms complying with ACI 347 to the exact sizes, shapes, lines and dimensions shown, and as required to obtain accurate alignment, location, grades and level and plumb work in the finished structure.
   2. Provide for openings, offsets, keyways, recesses, moldings, reglets, chambers, blocking, screens, bulkheads, anchorages, inserts, and other features as required.

B. Fabrication:
   1. Fabricate forms for easy removal without hammering or prying against concrete surfaces.
   2. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces.
   3. Kerf wood inserts for forming keyways, reglets, recesses, and the like to prevent swelling and assure ease of removal.
   4. Provide top forms for inclined surfaces where so directed by the Owner's Representative.

C. Forms for exposed concrete:
   1. Drill forms to suit ties being used, and to prevent leakage of cement paste around tie holes. Do not splinter forms by driving ties through improperly prepared holes.
   2. Provide sharp, clean corners at intersection planes, without visible edges or offsets. Back the joints with extra studs or girts to maintain true, square intersections.
   3. Use extra studs, walls and bracing to prevent objectionable bowing of forms between studs, and to avoid bowed appearance in concrete. Do not use narrow strips of form material which will produce bow.

D. Corner treatments:
   1. Unless shown otherwise, form chamfers with 3/4" x 3/4" strips, accurately formed and surfaced to produce uniformly straight lines and tight edges.
   2. Extend terminal edges to required limit, and miter the chamfer strips at changes in direction.

E. Locate control joints as indicated on the drawings and as approved by the Owner's Representative.

F. Provisions for other trades:
   1. Provide openings in concrete formwork to accommodate work of other trades.
   2. Verify size and location of openings, recesses, and chases with the trade

requiring such items.

3. Accurately place and securely support items to be built into the concrete.

3.03 REMOVAL OF FORMS

A. General:
   1. Do not disturb or remove forms until the concrete has hardened sufficiently to permit form removal with complete safety.
   2. Do not remove shoring until the member has acquired sufficient strength to support its own weight, the load upon it, and the added load of construction.
   3. Do not strip floor slabs in less than two days.
   4. Do not strip vertical concrete in less than seven days.

B. Finished surfaces:
   1. Exercise care in removing forms from finished concrete surfaces so that surfaces are not marred or gouged, and that corners are true, sharp, and unbroken.
   2. Release sleeve nuts or clamps, and pull the form ties neatly.
   3. Do not permit steel spreaders, form ties, or other metal to project from, or be visible on, any concrete surface except where so shown on the drawings.
   4. Solidly pack form tie holes, rod holes, and similar holes in the concrete. For packing, use the cement grout specified in Section 03300, flushing the holes with water before packing, screeding off flush, and grinding to match adjacent surfaces.

END OF SECTION

SECTION 03210
STEEL REINFORCEMENT

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Provide concrete reinforcement where shown on the drawings specified herein, and as needed for a complete and proper installation.

B. Related Work:
Section 03100: Concrete Formwork.
Section 03300: Cast-in-place Concrete.
Section 03345: Concrete Finishing.

l.02 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B. Comply with pertinent provisions of the following, except as may be modified herein:
1. ACl 318.
2. CRSI "Manual of Standard Practice."

1.03 SUBMITTALS

A. Comply with pertinent provisions of Section 01340.

B. Product data: After the Contractor has received the Owner's Notice to proceed, submit:
1. Materials list of items proposed to be provided under this Section.
2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
3. Shop Drawings showing details of bars, anchors, and other items, if any, provided under this Section.

1.04 PRODUCT HANDLING

A. Delivery and Storage:
1. Use necessary precautions to maintain identification.
2. Store in a manner to prevent excessive rusting and fouling with dirt, grease, and other bond-breaking coatings.

PART 2 - PRODUCTS

2.01 REINFORCEMENT MATERIALS AND ACCESSORIES

A. Bars:
   1. Provide deformed billet steel bars complying with ASTM A615. Using grades shown on the Drawings.

B. Steel Wire:
   1. Comply with ASTM A82.
   2. For tie wire, comply with Fed Spec QQ-W-461, annealed steel, black, 16 gage minimum.

C. Welded Wire Fabric:
   1. Provide welded steel, complying with ASTM A185, 6" x 6" x 10" x 10".

D. Bolsters, chairs, spacers, and other devices for spacing, supporting and fastening reinforcement in place:
   1. Use wire bar type supports complying with CRSI recommendations, unless otherwise shown on the Drawings.
   2. Do not use wood, brick, or other non-complying material.
   3. For slabs on grade, use supports with sand plates or horizontal runners where base material will not support chair legs.

2.02 FABRICATION

A. General:
   1. Fabricate reinforcing bars to conform to the required shapes and dimensions, with fabrication tolerances complying with the CRSI Manual.
   2. In case of fabricating errors, do not straighten or re-bend reinforcement in a manner that will weaken or injure the material.
   3. Reinforcement with any of the following defects will not be acceptable:
      a. Bar lengths, depths, and/or bends exceeding the specified fabrication tolerances.
      b. Bends and/or kinks not shown on the Drawings.
      c. Bars with reduced cross-section due to excessive rusting or other cause.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.02 INSTALLATION

A. General:
   1. Comply with the specified standards for detail and method of placing reinforcement and supports, except as may be modified herein.
   2. Clean reinforcement to remove loose rust and mill scale, earth, and other materials which reduce or destroy bond with concrete.
   3. Position, support, and secure reinforcement against displacement by formwork, construction, and concrete placing operations.
   4. Locate and support reinforcement by metal chairs, runners, bolsters, spacers, and hangers, as required.
   5. Place reinforcement to obtain minimum coverage's for concrete protection.
   6. Arrange, space, and securely tie bars and bar supports together with the specified tie wire.
   7. Set wire ties so twisted ends are directed away from exposed concrete surfaces.

B. Install welded wire fabric in as long lengths as practicable, lapping adjoining pieces at least one full mesh.

C. Provide sufficient numbers of supports, and of strength to carry the reinforcement.

D. Do not place reinforcing bars more than 2" beyond last leg of any continuous bar support.

E. Do not use supports as bases for runways for concrete conveying equipment and similar construction loads.

3.03 SPLICES

A. Lap Splices:
   1. Tie securely with the specified wire to prevent displacement of splices during placement of concrete.

B. Splice Devices:
   1. Obtain the Owner's Representative approval prior to using splice devices.
   2. Install in accordance with manufacturer's written instructions.
   3. Splice in a manner developing at least 125% of the yielding strength of the bar.

C. Welding:
   1. Perform in accordance with AWS D1.4-79.

D. Do not splice bars except at locations shown on the drawings, or as otherwise specifically approved by the Owner's Representative.

3.04 TESTING

A. Samples:
   1. Materials to be sampled at the building site shall have been delivered thereto at least 72 hours before it is needed.

END OF SECTION

SECTION 03300
CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.01 DESCRIPTION

A. The extent of cast-in-place concrete is shown on drawings.

B. Related work specified elsewhere:
Section 03100: Concrete Formwork.
Section 03210: Steel Reinforcement.
Section 03345: Concrete Finishing.

1.02 TESTING

A. Owner to employ and pay for an independent testing laboratory, to perform specified testing.

B. Tests required for aggregate:
1. Test for conformance to ASTM C-33.
2. Make one test for each 100 cubic yards of fine aggregate.
3. Make one test for each 250 cubic yards of coarse aggregate.

C. Tests required for concrete:
1. Make and store test specimens in conformance with ASTM C-31.
2. Compressive strength tests: ASTM C-39:
   a. Make four (4) cylinders for each test.
   b. Break two cylinders at seven days and two at 28 days unless otherwise directed by Owner's Representative.
3. Make one compressive strength test for each day's placement or each 50 cubic yards of concrete of each specified strength.
4. If test strength of concrete does not comply with strength requirements of these specifications and is sufficiently low that, in opinion of Owner's Representative, performance of structure is jeopardized, the Owner's Representative may require that drilled core test specimens be cut from structure at location at which the questionable concrete was placed. Cores shall be secured and tested in accordance with ASTM C-42. If results of these tests show that actual strength of concrete is sufficiently low as to jeopardize performance of structure, the Owner's Representative may require that concrete be removed from structure, and replaced at no additional cost to Owner.
5. Perform slump test at point of placement immediately prior to placing concrete. Test in accordance with ASTM C-143.
6. Test for percentage of entrained air in accordance with ASTM C-231 at time of slump testing.

D. Inspection of batch plant:

1. Batch plant operation will be inspected as required to insure that concrete delivered to the job complies with specifications. Testing laboratory engaged by Contractor will provide this service as directed by Owner's Representative.
2. Plant inspection reports shall include:
   a. Location of plant.
   b. Job location.
   c. Concrete design mix number and strength.
   d. Concrete design proportion, source, type and amount of cement, aggregates and admixtures used, surface water added and total water used.
   e. Slump.
   f. Air content.
   g. Temperature of heated concrete.
   h. Capacity and condition of mixing truck.
   i. Percent of capacity loaded.
   j. Condition of batching installation.
   k. Condition of heating installation.
   l. Period of inspection.
   m. Number and sizes of batches delivered.

1.04 REFERENCE STANDARDS

A. The following codes and manuals form a part of this specification:
   1. Standard Specifications for Structural Concrete for Buildings (ACI 301-72; Rev 81).
   2. Recommended Practice for Selecting Proportions for Concrete (ACI 211-77).
   3. Concrete production facilities shall have a current "National Ready Mixed Concrete Association Certificate of Conformance for Concrete Production Facilities".
   4. Building Code Requirements for Reinforced Concrete (ACI 318-77).

1.05 SUBMITTALS

A. Submit proposed mix design to Owner's Representative for review. Include certification required in admixture specification.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Cement: Portland Cement (ASTM C-150, Type I). Use high early strength Portland Cement (Serial designation C-150, Type III) where specified and elsewhere at Contractor's option and at no additional cost to Owner.
B. Fine aggregate: Sand particles shall be coarse, sharp, clean and conforming to ASTM C-33.
C. Coarse aggregate:

1. Crushed limestone conforming to ASTM C-33 for normal weight concrete.
2. Light weight conforming to ASTM C-330 for semi-light weight concrete. Minimum Fsp (splitting ratio) of 6.0.

D. Water: Clean and free from injurious amounts of oil, acids, alkalines, organic materials or other deleterious substances.

E. Admixtures:
1. Water reducing admixture: ASTM C-494, Type A, containing no more chlorideions than are present in municipal drinking water.
   a. Acceptable products:
      (1) Eucone WR-75; The Euclid Chemical Co.
      (2) Pozzolith ZOON: Master Builders.
      (3) Plastocrete 160; Sika Chemical Corp.
2. Water reducing, retarding admixture: ASTM C 494, Type D, containing no more chlorideions than are present in municipal drinking water.
   a. Acceptable products:
      (1) Eucone Retarder-75: Euclid Chemical Co.
      (2) Pozzolith 100XR: Master Builders.
      (3) Plastiment: Sika Chemical Co.
3. High range water reducing admixture (Superplasticizer): ASTM C-494, Type F or G, containing no more chlorideions than are present in municipal drinking water.
   a. Acceptable products:
      (1) Eucon 37; The Euclid Chemical Co.
      (2) Sikament; Sika Chemical Corp.
4. Non-chloride accelerator: ASTM C-494, Type C or E, containing no more chlorideions than are present in municipal drinking water.
   a. Acceptable products:
      (1) Accelguard 80; The Euclid Chemical Co.
      (2) Darex Set Accelerator; W. R. Grace.
5. Air entraining admixture: ASTM C-260.
6. No calcium chloride or admixtures containing more than 0.1% chloride ions will be permitted.
7. Written certification of conformance to specified requirements and the chloride ion content will be required from admixture manufacturer prior to mix design review.

F. Curing compound: ASTM C-309 for cast-in-place slabs, except those receiving concrete staining products cementious topping, or tennis court surfacing. No concrete treatment shall be used without Owner's Representative's approval.
1. Acceptable products:
   a. West Concrete Floor Treatment.
   b. Guardian Clear Bond.
   c. TRI-KOTE Concrete Treatment.
   d. Horn Clear Seal.
   e. Master Builders Master Seal.
   f. Conspec No. 1" by Conspec Marketing & Mfg. Co.

G. Furnish concrete in accordance with ASTM C-94, Alternate No. 3, Specification for Ready Mixed Concrete. Design concrete in accordance with ACI Standard Recommended Practice for the Design of Concrete Mixes (ACI 211-77) to produce strength of concrete with slumps and maximum sizes of coarse aggregate specified. Design concrete so the concrete materials will not segregate and excessive bleeding will not occur.

H. Reinforcing: As specified in Division 3.

I. Floor underlayment: Ardex K-15; Ardex, Inc., 630 Stoops Ferry Road, Corapolis, Pa. 15108, (412) 264-4240.

Note: Curing agents or hardeners are not allowed for tennis courts, sport courts, playground or spraygrounds surfaces to receive color finish.

2.02 CONCRETE MIX REQUIREMENTS

A. Use a testing laboratory acceptable to Owner's Representative for preparing and reporting proposed mix designs. Submit written reports to Owner's Representative of each proposed mix at least 28 days prior to start of work. Do not place concrete until mixes have been reviewed and approved by Owner's Representative. The specified minimum strengths are to be exceeded in accordance with Paragraph 4.3 of Building Code Requirements for Reinforced Concrete (ACI 318-83).

B. Minimum compressive strength 28 day: 3000 psi footings; 3500 psi, all other unless specifically called out on the plans.

C. Minimum cement content: 5 sacks per cu. yd. for footings; 6 sacks per cu. yd. for other unless otherwise approved in submittals.

D. Slump: 4" plus or minus 1".

E. Maximum size aggregate: Generally 3/4".

2.03 WATER STOP

A. Acceptable manufacturers: Williams Products, Inc.

B. Flat, natural rubber, dumbbell type, 5" wide, 1/4" minimum center thickness, 3500 psi minimum tensile strength, 525% minimum elongation to break.

2.04 COLORING

A. NOT USED

PART 3 - EXECUTION

3.01 PLACING

A. Notify Owner's Representative of intent to pour at least twenty-four (24) hours prior to placing concrete.

B. Before placing concrete, clean equipment for mixing and transporting concrete. Remove debris and ice from spaces to be occupied by concrete. Forms to be removed shall be thoroughly wetted or oiled. Sprinkle sub-grade sufficiently to prevent suction, where waterproof membrane is not required. Remove excess water from place of deposit. Reinforcement, forms, membrane, fillers and ground with which concrete is to come in contact shall be free from frost. Do not deposit concrete during rain unless it is adequately protected. In that case, be prepared to protect newly placed concrete from rain until it has hardened sufficiently so that it will not be damaged. Minimum of 2 hours between placing columns and floors.

C. Before placing concrete, verify installation of all reinforcements, sleeves, waterproof membrane, forms for openings, fill materials, anchors and items related to mechanical, plumbing and electrical trades.

D. Convey from mixer to place of final deposit by methods which will prevent separation or loss of materials. Do not permit concrete to drop freely any distance greater than 4 feet. Where longer drops are necessary, use a chute, tremie or other approved conveyance to assist concrete into place without separation. Chutes shall be metal and have maximum slope of 1 vertical to 2 horizontal; minimum of 1 vertical to 3 horizontal. Chutes greater than 20 feet long will not be permitted.

E. Place concrete at a rate to keep concrete plastic and flowing readily into spaces between bars. Concrete temperature shall be 60-80□F. No concrete that is partially hardened or has been contaminated by foreign materials shall be deposited, nor shall re-tempered concrete be used.

F. Thoroughly compact concrete by suitable means during placing and work around reinforcement and into corners and recesses of forms. Use vibrators under competent supervision to aid in placement of concrete. Insert vibrators and withdraw vertically at 18" to 30" spacing for 5 to 15 seconds duration.

3.02 HOT WEATHER CONCRETING

A. Conform to ACI 305 when concreting during hot weather.

3.03 COLD WEATHER CONCRETING

A. Conform to ACI 306 when concreting during cold weather.

3.04 FINISH FOR FORMED CONCRETE

A. After removal of forms, if any honeycomb places or rock pockets exist, notify Owner's Representative and repair in accordance with his instructions. In general, remove all loose material, wet surface thoroughly, and fill all voids with a stiff mixture of one part cement to two parts sand. In exposed construction, mix white Portland Cement with standard to blend patch with surrounding surface.

B. On exposed concrete, smooth off joint marks and fins and leave surface smooth, dense and free from honeycomb, prominent grain markings and bulges or depressions more than 3/16" in 4'.

C. Cork floated finish (on exposed concrete, except omit at round columns):
   1. Remove forms at an early stage, within 2 to 3 days of placement where possible. Remove ties. Remove all burrs and fins.
   2. Mix one part Portland Cement and one part fine sand with sufficient water to produce a stiff mortar. Dampen wall surface. Apply mortar with firm rubber float or with trowel, filling all surface voids. Compress mortar into voids using a slow-speed grinder or stone. If the mortar surface dries too rapidly to permit proper compaction and finishing, apply a small amount of water with a fog-sprayer. Produce the final texture with a cork float.

3.05 FINISH FOR SLABS

A. After suitable bulkheads, screens and, if specified, jointing materials have been positioned, concrete shall be placed continuously between construction joints, beginning at a bulkhead edge form or corner. Place each batch into the edge of previously placed concrete to avoid stone pockets and segregations. If there is a delay in casting, thoroughly spade concrete placed after the delay and consolidate at edge of that previously placed to avoid cold joints. Distribute concrete by shovels and consolidate by other suitable means. Bring concrete to correct level with a wood straightedge and strike off. Do not use wood bullfloats or darbies to smooth the surface.

B. Roughen slabs to receive toppings with stiff brushes or rakes before the final set.

C. After concrete has been properly placed, struck off and darbied or bullfloated, it shall not be worked until ready for floating. The off time between darbying and power floating may vary from 2 to 8 hours or more depending on the weather conditions, concrete temperature and concrete mixture. Begin power floating when water sheen has disappeared and mix has stiffened sufficiently that weight of a man standing on it leaves only a slight imprint on surface. If two power floating operations are necessary to bring surface to desired state, allow concrete to stiffen or become harder before beginning second floating operation.

D. Float finish: After power floating is complete, use wood float by hand to tighten the surface and achieve a medium coarse finish. Hand wood float in a circular motion. Float sufficiently to remove cement paste from surface.

E. Trowel finish: Both power and hand troweling shall be required. Begin power troweling as soon as little or no cement paste clings to blades. Continue troweling until surface is dense, smooth and free of all minor blemishes, such as trowel marks.
   1. Final hand troweling shall be required to remove slight imperfections left by troweling machines and to bring surface to a dense, smooth polished finish. Final hand troweling shall be continued until a ringing sound is heard as trowel passes over surface.

F. Give platforms and steps a light broom finish following sufficient troweling to seal the surface and remove all minor blemishes such as trowel marks.

G. Pitch all slabs to drain as indicated on drawings; finish exposed slab edges; stair nosings with 1/2" round radius.

H. Finishes shall be true to planes to match requirements of Section 02514-3.01-C. If variations greater than this exist, the Owner's Representative may direct contractor to grind floor to bring surface within the requirements. Grind as soon as possible, preferably within three (3) days, but not without Owner's Representative's direction and not until concrete is sufficiently strong to prevent dislodging coarse aggregate particles. Grinding will be considered only where slabs will be covered by finish materials. Patching of low spots will not be permitted.
   1. Sprinkling of dry cement or a mixture of dry cement and sand on the surface of fresh concrete to absorb water or to stiffen the mix will not be permitted during any stage of floor construction. If bleeding is excessive, remove by dragging hose just ahead of floating operation.

3.06 CURING

A. Protect freshly deposited concrete from premature drying and excessively hot or cold temperatures. Maintain without drying at a relatively constant temperature for the period of time necessary for hydration of cement and proper hardening of concrete.

B. Initial curing shall immediately follow finishing operation. Keep concrete continuously moist at least overnight.
   1. On slabs, use one of the following:
      a. Ponding or continuous sprinkling.
      b. Absorptive mat or fabric kept continuously wet.
      c. Sand or other covering kept continuously wet.

C. Immediately following initial curing and before concrete has dried, additional curing shall be accomplished by one of the following materials or methods:
   1. Continuing the method used in initial curing.

2. Waterproof paper conforming to "Specifications for Waterproof Paper for Curing Concrete" (ASTM C-171).
3. Other moisture-retaining coverings approved.

D. Continue final curing until the cumulative number of days or fractions thereof, not necessarily consecutive, during which temperature of air in contact with concrete is above 50□F has totaled seven (7) days. Prevent rapid drying at end of curing period.

E. Excessive temperature changes: Changes in temperature of concrete shall be as uniform as possible and shall not exceed 5 Deg. F in any one (1) hour or 50 Deg. F in any twenty-four (24) hour period.

F. Steel forms heated by sun and all wood forms in contact with concrete during final curing period shall be kept wet. If forms are to be removed during curing period, immediately employ one of above curing materials or methods. Continue such curing for remainder of curing period.

G. On completion of construction, clean all exposed slabs and apply a coat of curing compound at rate of 600 sq. ft. per gallon.

3.07 LEVELING EXISTING SLABS

A. Mix floor underlayment with water and apply to existing slab in accordance with manufacturer's instructions. Level floor to a tolerance of 1/8" in ten feet in any direction.

END OF SECTION

SECTION 03345
CONCRETE FINISHING

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: provide finishes on cast-in-place concrete as called for on the drawings, specified herein, and needed for a complete and proper installation.

B. Related work:
Section 03300: Cast-in-place Concrete

1.02 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.03 SUBMITTALS

A. Comply with pertinent provisions of Section 01340.

B. Product data: After the Contractor has received the Owner's Notice to Proceed, submit:
1. Materials list of items proposed to be provided under this section.
2. Manufacturer's recommended installation procedures which, when approved by the Owner's Representative, will become the basis for accepting or rejecting actual installation procedures used on the work.

PART 2 PRODUCTS

2.01 MATERIALS

A. General:
1. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until conditions are correct.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until conditions are correct.

3.02 FINISHING SLABS

A. Definition of Finishing Tolerances:
   1. Class “B”: True plane within tolerances described in Section 02514-3.01-C as determined by a ten foot straightedge placed anywhere on the slab in any direction.
   2. Unless otherwise directed by the Owner's Representative, provide the texturing in one direction only.
   3. Provide “medium” texturing as directed by the Owner's Representative or otherwise called for on the drawings.

3.03 CURING AND PROTECTION

A. Beginning immediately after placement, protect concrete from premature drying, excessively hot and cold temperatures, and mechanical injury.

B. Temperature, Wind, and Humidity:
   1. Cold Weather:
      a. When the mean daily temperature outdoors is less than 40 degrees F, maintain the temperature of the concrete between 50 degrees F and 70 degrees F for the required curing period.
      b. When necessary, provide proper and adequate heating system capable of maintaining the required heat without injury due to concentration of heat.
      c. Do not use combustion heaters during the first 24 hours unless precautions are taken to prevent exposure of the concrete to exhaust gases which contain carbon dioxide.

   2. Hot Weather: When necessary, provide wind breaks, fog spraying, shading, sprinkling, ponding, or wet covering with a light colored material, applying as quickly as concrete hardening and finishing operations will allow.

   3. Rate of temperature change: Keep the temperature of the air immediately adjacent to the concrete during and immediately following the curing period as uniform as possible and not exceeding a change of 5 degrees F in any one hour period, or 50 degrees F in any 24 hour period.

C. Protection From Mechanical Injury:
   1. During the curing period, protect the concrete from damaging mechanical disturbances such as heavy shock, load stresses, and excessive vibration.
   2. Protect finished concrete surfaces from damage from construction equipment, materials, and methods, by application of curing procedures, and by rain and running water.
   3. Do not load self-supporting structures in such a way as to over stress the concrete.

END OF SECTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the contract apply to work specified in this section as well as all codes and standards referenced.

1.02 DESCRIPTION

A. These specifications cover the furnishing of all labor, material, services, supplies and equipment required in conjunction with or properly incidental to the pre-stressing of concrete by the post-tensioning method as shown on the plans and as specified herein.

B. Related work not included in this Section include:
Section 03100: Concrete Formwork.
Section 03210: Steel Reinforcement.
Section 03300: Cast-in-Place Concrete.

1.03 TERMS DEFINED

A. Post-tensioning shall refer to a method of pre-stressing concrete in which the post-tensioning tendon is tensioned after concrete has been placed and cured to the minimum specified strength.
1. Tendon: The complete assembly consisting of anchorage, pre-stressing steel and sheathing. The tendon imparts pre-stressing forces to the concrete.
2. Anchorage: The means by which the pre-stressing force is permanently transmitted from the pre-stressing steel to the concrete.
3. Pre-stressing: That element of a post-tensioning tendon which is elongated and anchored to provide the necessary permanent pre-stressing force.
4. Sheathing: Enclosure around the pre-stressing steel to avoid temporary bond between the pre-stressing steel and the surrounding concrete.

1.04 QUALITY ASSURANCE

A. Materials and Procedures: The following post-tensioning materials and design procedure specifications apply and are part of this Specification.
1. ASTM A416.
2. PTI "Tentative Specification for Post-Tensioning Materials".
3. ACI 318 "Building Code Requirements for Reinforced Concrete".
4. ACI 301 "Specifications for Structural Concrete for Buildings".

B. Post-Tensioning Installer-Experience: Post-tensioning concrete work specified in this Section shall be performed only by an installer having not less than 3 years experience in post-tensioning work and who has successfully completed at least 5 installations of nature and magnitude similar to this project.

Work is to be completed under immediate and continual control of installer's Superintendent with adequate previous experience.

1.05 SUBMITTALS

A. Comply with provisions of Section 01340.
B. Shop Drawings:
   1. Shop drawings showing any additional details of tendon profile, anchorage components and stressing procedures not shown on the drawings shall be submitted for approval by the Owner's Representative.
C. Data Reports and Tests:
   1. Field reports of elongation and tension applied for each tendon and each stressing operation are to be compiled and submitted to the Owner's Representative by an independent qualified individual or subcontractor.

1.06 DELIVERY, HANDLING AND STORAGE

A. Deliver post-tensioning steel in prefabricated coils, tagged and marked. Use metal tags indicating location, length and other information corresponding to placement drawings.
B. Store post-tensioning steel off the ground and in a manner to prevent rust, damage and accumulation of dirt.

PART 2 - MATERIALS

2.01 PRODUCTS

A. Unbonded Tendons: Pre-stressing steel shall be uncoated seven-wire low-relaxation strand for pre-stressed concrete manufactured in accordance with ASTM A416, Grade 270.
B. Anchorages: The anchorages of unbonded tendons shall develop the minimum specified ultimate strength of the pre-stressing steel. Elongation under ultimate load of the tendon shall not be less than 2 percent measured in a minimum gauge length of 10 feet.
C. Sheathing, Unbonded Strand:
   1. Coat strands to protect them permanently against corrosion and rust. Strand shall be completely shop coated with a non-volatile, low friction mineral oil base grease with a rust preventing additive having a uniform viscosity under temperature ranges of 20 degrees F to 120 degrees F.
   2. Provide continuous coating that will remain ductile and free from cracks without becoming fluid over anticipated range of temperatures, chemically stable and non-reactive to cement and material used for sheathing.
   3. The sheathing for the unbonded strand shall have tensile strength and water-resistance sufficient to resist un-repairable damage and deterioration during transport, storage at the jobsite and installation. The sheathing shall prevent the intrusion of cement paste and the escape of the coating material. The sheathing shall be extruded polyethylene or polypropylene tube. Damage in the sheathing shall be repaired by re-sheathing prior to concreting as recommended and directed by the manufacturer. Except where repaired and approved by Owner's Representative, damaged sheathing shall be rejected and new strands with no damage shall be installed.

D. Anchorages:
   1. All anchorages shall meet the minimum requirements as set forth in the "Tentative Specification for Post-Tensioning Materials" as prepared by the Post-Tensioning Institute.
   2. The load from the anchoring device shall be uniformly distributed to the concrete by means of approved devices. Such approved devices shall conform to the following requirements.
      a. Provide anchor plates of sufficient size to keep concrete bearing stresses within allowable limit of ACI 318 for the specified concrete strength at stressing.
      b. Enclose splices in housings long enough to permit necessary movements.

E. Grout Materials for Stressing Pockets:
   1. Mixture of cement, sand, and water. Aggregate and/or mix shall not contain any metallic materials. Slump shall be as low as practical for application.
   2. Bonding agent for grouting stress pockets: Aqueous phase film forming freeze-thaw resistant compound suitable for brush or spray application and complying with Mil-B-19235, Chem-Master Corporation; "Polyweld", Larsen Products Corporation; "Welder", W. R. Grace; "Daraweld-PBA" or approved equal.

2.02 DESIGN CRITERIA

A. Strand: Base selection on required spacing indicated and per project requirements.
   1. Maximum working stress in strands at 70% of minimum guaranteed ultimate strength of strand immediately after anchoring strand. Temporary stress in strands is not to exceed 80% of minimum guaranteed ultimate strength of strand without approval of the Owner's Representative.

2.03 MANUFACTURE

A. Post-tensioning tendons shall be fabricated in accordance with detailed construction drawings as provided by the Owner's Representative, unless otherwise noted on the plans.
B. Precaution shall be taken to prevent rust through prolonged exposure of the pre-stressing steel. Contractor shall coordinate deliveries and provide storage to keep exposure of strands to corrosion to a minimum.
C. Remove and replace strands having broken wires and/or strands showing fabrication defects.
D. Tag pre-stressing steel with assigned heat number.

2.04 EQUIPMENT

A. Fabricating and Placing: All equipment used for fabricating, handling and placing tendons shall be such that it does not damage or deteriorate the pre-stressing steel or the anchorages.

B. Stressing: All hydraulic jacks shall be equipped with calibrated hydraulic pressure gauges to permit the stress in pre-stressing steel to be computed at any time. A calibration chart shall accompany each jack-pump-gauge unit. If inconsistencies

between the measured elongation and the jack gauge reading occur, the jack and gauge shall be recalibrated. An agreement of within +\- 5% shall be satisfactory. Check jack chucks for uneven wear before each use and replace if such wear is evident.

PART 3 - EXECUTION

3.01 PLACING

A. Installation:
   1. The installation of post-tensioned tendons shall be performed by an organization that has successfully completed previous installations of a major nature similar to the one involved in this contract.
   2. All post-tensioning shall be under the immediate control of a person experienced in this type of work. He shall exercise close check and rigid control of all operations as necessary for full compliance with all requirements.
   3. Post-tensioning strands have priority over the other reinforcement, conduit and embedded items for location.
   4. Location of pre-stressing tendons in the field must be in accordance with the approved shop drawings. Any changes due to interference with other trades must be approved by the Owner's Representative.

B. Profile: Provide suitable horizontal and vertical spacers and/or chairs as required to hold strands in true position and in required profile. Placing tolerance: +\- ½ inch in vertical direction.

C. Fabrication: Fabricate all strands in given pour full length without splices or couplers unless accepted by the Owner's Representative.

D. Horizontal Deviation:
   1. Strands shall clear openings and drains by at least 6 inches. Slight deviation in spacing of strands is permitted where required to avoid openings and inserts which are specifically located on drawings.

   2. Keep horizontal plane deviations to a radius of curvature of not less than 21 ft.

E. Blockouts/Sleeves/Openings: Provide blockouts or sleeves prior to the concrete pour for all openings required by Owner's Representative through the pre-stressed slabs. Any openings not provided for shall be located to miss pre-stressing tendons and locations shall be submitted for approval prior to cutting any opening.

F. Concrete Placement:
   1. Concrete shall be placed in such a manner as to ensure that alignment or post-tensioning tendons remains unchanged. Special provision shall be made to ensure proper vibration of concrete around tendon bearing plates.
   2. Where the end of a post-tensioned assembly will not be covered by concrete, the anchoring devices shall be recessed so that the ends of the pre-stressing steel and all parts of the anchoring devices will be at least 2 inches inside of the end surface of the members. Unless a greater embedment is shown on the plans. Following post-tensioning, the recesses shall be filled with non-metallic, non-shrink grout and finished flush.

3.02 STRESSING

A. Concrete Strength: Do not commence tensioning until concrete has reached a strength of at least f'c = 2,100 psi or as otherwise specified on the drawings, as evidenced by test results of field cured cylinders and until approval has been given by the Owner's Representative. Perform testing by approved independent testing laboratory in accordance with ANSI/ASTM C31. Minimum of three field cured cylinders are required for each break.

B. Tendon Position: If tendons move out of their designed positions during concreting operations, adjust tendons to their correct position.

C. Records: Keep records of elongation and tension applied to each tendon and submit them to the Owner's Representative promptly upon completion of each slab.

D. Procedure: At the time of stressing, check individual strand to establish procedure for ensuring uniform results.

E. Recheck: Owner's Representative shall have the right to order a recheck at any time it appears that design stresses are not being attained.

F. Sheathing Check: Do not tension unless the stressing steel is reasonably free and unbonded in enclosure. All tears and holes in the enclosure shall be repaired before concreting begins.

G. Record Review: Do not cut or cover strand ends until tensioning records have been received and reviewed by the Owner's Representative and his permission given to proceed.

3.03 GROUTING OF STRESSING POCKETS

A. Coat exposed tensioning recesses with an approved bonding agent and then fill flush with specified grout. Perform this work as soon as practical after completion of stressing.

END OF SECTION

SECTION 07900
SEALANTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. The general provisions of the Contract, including Standard Requirements for Contract Work, Special Provisions and General Requirements, apply to the work specified in this Section.

1.02 SCOPE

A. Work under this Section consists of furnishing everything necessary for and incidental to the execution and completion of all sealant work, as indicated on the Drawings and specified herein.

1.03 DESCRIPTION OF WORK

A. The extent of sealant work is indicated on the Drawings.

B. The required applications of sealants includes, but are not necessarily limited to the following general locations:

1. New Sidewalk Expansion Joints.
2. Between Courts and Fence Bands.

1.04 QUALITY ASSURANCE

A. Obtain sealant materials only from manufacturers who will, if required, send a qualified technical representative to the project site, for the purpose of advising the installer of proper procedures and precautions for the use of the materials.

B. Installer: A firm with a minimum of five (5) years successful experience in the application of the types of materials required.

1.05 SUBMITTALS

A. Comply with Section 01340.

B. Samples, Sealants and Caulking: Submit three (3), 12" long samples of each color required (except black) for each type of sealant or caulking compound exposed to view. Install sample between 2 strips of material similar to or representative of typical surfaces where sealant or compound will be used, held apart to represent typical joint widths. Samples will be reviewed by Owner's Representative for color and texture only. Compliance with all other requirements is the exclusive responsibility of the Contractor.

C. Guarantee, Sealants: Submit four (4) copies of written guarantee agreeing to repair or replace sealants which fail to perform as air-tight and water-tight joints; or fail in joint adhesion, cohesion, abrasion resistance, weather resistance, extrusion resistance, migration resistance, stain resistance, or general durability; or appear to deteriorate in any other manner not clearly specified by submitted manufacturer's data, as an inherent quality of the material for the exposure indicated. Provide guarantee signed by the Installer and Contractor.

1. Guarantee period of one (1) year from and after acceptance of the project by the Owner.

1.06 JOB CONDITIONS

A. Pre-Installation Meeting: At the Contractor's direction, the Installer, Owner and/or the Owner's Representative, sealant manufacturer's technical representative, and other trades involved in coordination with sealant work shall meet with the Contractor at the project site to review the procedures and time schedule proposed for installation of sealants in coordination with other work. Review each major sealant application required on the project.

B. Condition of Other Work: The Installer must examine the joint surfaces, backing, and anchorage of units forming sealant rabbet, and the conditions under which the sealant work is to be performed, and notify the Contractor and the Owner's Representative in writing of conditions detrimental to the proper and timely completion of the work and performance of the sealants. Do not proceed with the sealant work until unsatisfactory conditions have been corrected in a manner acceptable to the Installer.

C. Weather Conditions: Do not proceed with installation of sealants under adverse weather conditions, or when temperatures are below or above manufacturer's recommended limitation for installation. Proceed with the work only when forecasted weather conditions are favorable for proper cure and development of high early bond strength. Wherever joint width is affected by ambient temperature variations, install elastomeric sealants only when temperatures are in the lower third of manufacturer's recommended installation temperature so that sealant will not be subjected to excessive elongation and bond stress at subsequent low temperatures. Coordinate time schedule with Contractor to avoid delay of project.

PART 2 - PRODUCTS

2.01 MATERIALS, GENERAL

A. Colors: Provide manufacturer's standard colors plus thirty (30) additional Fastpak, as selected by Owner's Representative.

B. Compatibility: Before purchase of each specified sealant, investigate it's compatibility with the joint surfaces, joint fillers, sealers and other materials in the system. Provide only materials (manufacturer's recommended variation of the specified materials) which are know to be fully compatible with the actual installation condition, as shown by

manufacturer's published data or certification.

C. Provide size and shape of preformed sealant units as shown or, if not shown, as recommended by the manufacturer, either in the published data or upon consultation with technical representative.

2.02 SELF-LEVELING JOINT SEALANT

A. Materials shall be Tremco THC-900 multi-component, chemically curing, self-leveling polyurethane joint sealant as manufactured by Tremco, 10701 Shaker Blvd., Cleveland, Ohio 44104, or approved equal.

2.03 GENERAL PURPOSE SEALANT

A. Materials shall be Tremco Dymeric, epoxidized polyurethane terpolymer general purpose sealant as manufactured by Tremco, 10701 Shaker Blvd., Cleveland, Ohio 44104, or approved equal.

2.04 MISCELLANEOUS MATERIALS

A. Joint Cleaner: Provide the type of joint cleaning compound recommended by the sealant or caulking compound manufacturer, for the joint surfaces to be cleaned.

B. Joint Primer/Sealer: Provide the type of joint primer/sealer recommended by the sealant manufacturer, for the joint surfaces to be primed or sealed.

C. Bond Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer, to be applied to sealant-contact surfaces where bond to the substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape wherever applicable.

D. Sealant Backer Rod: Compressible rod stock polyethylene foam, polyethylene jacketed polyurethane foam, butyl rubber foam, neoprene foam or other flexible, permanent, durable non-absorptive material as recommended for compatibility with sealant by the sealant manufacturer. Provide size and shape of rod which will control the joint depth for sealant placement, break bond of sealant at bottom of joint, form optimum shape of sealant bead on back side, and provide a highly compressible backer to minimize the possibility of sealant extrusion when joint is compressed.

2.05 APPLICATIONS

A. Tremco THC-900 Sealant: Provide at all exterior horizontal slab or paving joints.

B. Tremco Dymeric Sealant: Provide at all other joints noted on the Drawings and around steel handrail base plates where handrail has been raised.

PART 3 - EXECUTION

3.01 JOINT SURFACE PREPARATION

A. Clean joint surfaces immediately before installation of sealants. Remove dirt, insecure coatings, moisture and other substances which would interfere with bond of sealants. All joint surface preparation shall be in accordance with sealant manufacturer's printed instructions.

3.02 INSTALLATION

A. Comply with sealant manufacturer's printed instructions except where more stringent requirements are shown or specified and except where manufacturer's technical representative directs otherwise.

B. Prime or seal the joint surfaces wherever shown or recommended by the sealant manufacturer. Do not allow primer/sealer to spill or migrate onto adjoining surfaces.

C. Install sealant backer rod for liquid elastomeric sealants, except where shown to be omitted or recommended to be omitted by sealant manufacturer for the application shown.

D. Install bond breaker tape wherever required by manufacturer's recommendations to ensure that elastomeric sealants will perform properly.

E. Employ only proven installation techniques, which will ensure that sealants will be deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces. Where horizontal joints are between a horizontal surface and a vertical surface, fill joint to form a slight cove, so that joint will not trap moisture and dirt.

F. Install sealants to depths as shown or, if not shown, as recommended by the sealant manufacturer but within the following general limitations, measured at the center (thin) section of the bead.

G. Spillage: Do not allow sealants or compounds to overflow or spill onto adjoining surfaces, or to migrate into the voids of adjoining surfaces including rough textures such as exposed aggregate panels. Use masking tape or other precautionary devices to prevent staining of adjoining surfaces, by either the primer/sealer or the sealant/caulking compound.

H. Remove excess and spillage of compounds promptly as the work progresses. Clean the adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage, without damage to the adjoining surfaces of finishes.

3.03 CURE AND PROTECTION

A. Cure sealants and caulking compounds in compliance with manufacturer's instructions and recommendation, to obtain high early bond strength, internal cohesive strength and surface durability.

B. The Installer shall advise the Contractor of procedures required for the curing and protection of sealants and caulking compounds during the construction period, so that they will be without deterioration or damage (other than normal wear and weathering) at the time of Owner's acceptance.

END OF SECTION

SECTION 032000
CONCRETE REINFORCING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Reinforcing steel for cast-in-place concrete.

B. Supports and accessories for steel reinforcement.

1.02 RELATED REQUIREMENTS

A. Section 033000 - Cast-in-Place Concrete.

1.03 REFERENCE STANDARDS

A. ACI 301 - Specifications for Structural Concrete; 2016.

B. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2014 (Errata 2018).

C. ACI SP-66 - ACI Detailing Manual; 2004.

D. ASTM A184/A184M - Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement; 2019.

E. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2020.

F. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2018a.

G. CRSI (DA4) - Manual of Standard Practice; 2009.

H. CRSI (P1) - Placing Reinforcing Bars; 2011.

1.04 SUBMITTALS

A. Shop Drawings: Comply with requirements of ACI SP-66. Include bar schedules, shapes of bent bars, spacing of bars, and location of splices.

1.05 QUALITY ASSURANCE

A. Perform work of this section in accordance with ACI 301.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Do not store reinforcing materials in contact with ground.

PART 2 PRODUCTS

2.01 REINFORCEMENT

A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
   1. Plain billet-steel bars.
   2. Unfinished.

B. Steel Welded Wire Reinforcement (WWR): Galvanized, deformed type; ASTM A1064/A1064M.
   1. Form: Flat Sheets.

C. Reinforcement Accessories:
   1. Tie Wire: Annealed, minimum 16 gauge, 0.0508 inch.
   2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.
   3. Provide stainless steel components for placement within 1-1/2 inches of weathering surfaces.

2.02 FABRICATION

A. Fabricate concrete reinforcing in accordance with CRSI (DA4) - Manual of Standard Practice.

B. Welding of reinforcement is not permitted.

C. Locate reinforcing splices not indicated on drawings at point of minimum stress.

PART 3 EXECUTION

3.01 PLACEMENT

A. Comply with requirements of ACI 301. Clean reinforcement of loose rust and mill scale.

B. Place, support and secure reinforcement against displacement. Do not deviate from required position.

C. Do not displace or damage vapor barrier.

D. Accommodate placement of formed openings.

E. Comply with applicable code for concrete cover over reinforcement.

F. Bond and ground all reinforcement to requirements of Section 260526.

3.02 FIELD QUALITY CONTROL

A. An independent testing agency will inspect installed reinforcement for compliance with contract documents before concrete placement.

END OF SECTION

SECTION 033000
CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete formwork.

B. Floors and slabs on grade.

C. Concrete shear walls, elevator shaft walls, and foundation walls.

D. Concrete foundations and anchor bolts for pre-engineered building.

E. Joint devices associated with concrete work.

F. Miscellaneous concrete elements, including equipment pads, light pole bases, and flagpole bases.

G. Concrete curing.

1.02 RELATED REQUIREMENTS

A. Section 032000 - Concrete Reinforcing.

1.03 REFERENCE STANDARDS

A. ACI 117 - Specifications for Tolerances for Concrete Construction and Materials; 2010 (Reapproved 2015).

B. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; 1991 (Reapproved 2009).

C. ACI 301 - Specifications for Structural Concrete; 2016.

D. ACI 302.1R - Guide to Concrete Floor and Slab Construction; 2015.

E. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete; 2000 (Reapproved 2009).

F. ACI 305R - Guide to Hot Weather Concreting; 2010.

G. ACI 306R - Guide to Cold Weather Concreting; 2016.

H. ACI 308R - Guide to External Curing of Concrete; 2016.

I. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2014 (Errata 2018).

J. ACI 347R - Guide to Formwork for Concrete; 2014, with Errata (2017).

K. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2020.

L. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2018a.

M. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2018.

N. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2020.

O. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2020.

P. ASTM C109/C109M - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens); 2020a.

Q. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete; 2015a.

R. ASTM C150/C150M - Standard Specification for Portland Cement; 2020.

S. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete; 2016.

T. ASTM C173/C173M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method; 2016.

U. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete; 2010a (Reapproved 2016).

V. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete; 2019.

W. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete; 2019.

X. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete; 2019.

Y. ASTM C685/C685M - Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing; 2017.

Z. ASTM C827/C827M - Standard Test Method for Change in Height at Early Ages of Cylindrical Specimens of Cementitious Mixtures; 2016.

AA. ASTM C881/C881M - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete; 2015.

AB. ASTM C1059/C1059M - Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete; 2013.

AC. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink); 2017.

AD. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures; 2020.

AE. ASTM C1315 - Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete; 2019.

AF. ASTM C1602/C1602M - Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete; 2012.

AG. ASTM D2103 - Standard Specification for Polyethylene Film and Sheeting; 2015.

AH. ASTM E1643 - Standard Practice for Selection, Design, Installation and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs; 2018a.

AI. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs; 2017.

AJ. COE CRD-C 513 - COE Specifications for Rubber Waterstops; 1974.

AK. NSF 61 - Drinking Water System Components - Health Effects; 2019.

AL. NSF 372 - Drinking Water System Components - Lead Content; 2016.

1.04 SUBMITTALS

A. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
   1. For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives.

B. Mix Design: Submit proposed concrete mix design.
   1. Indicate proposed mix design complies with requirements of ACI 301, Section 4 - Concrete Mixtures.
   2. Indicate proposed mix design complies with requirements of ACI 318, Chapter 5 - Concrete Quality, Mixing and Placing.

C. Samples: Submit samples of underslab vapor retarder to be used.

D. Test Reports: Submit report for each test or series of tests specified.

E. Manufacturer's Installation Instructions: For concrete accessories, indicate installation procedures and interface required with adjacent construction.

F. Project Record Documents: Accurately record actual locations of embedded utilities and components that will be concealed from view upon completion of concrete work.

1.05 QUALITY ASSURANCE

A. Perform work of this section in accordance with ACI 301 and ACI 318.

B. Follow recommendations of ACI 305R when concreting during hot weather.

C. Follow recommendations of ACI 306R when concreting during cold weather.

PART 2 PRODUCTS

2.01 FORMWORK

A. Formwork Design and Construction: Comply with guidelines of ACI 347R to provide formwork that will produce concrete complying with tolerances of ACI 117.

B. Form Materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
   1. Earth Cuts: Earth cuts may be used for foundation elements only with approval from Geotechnical Engineer and Structural Engineer of Record.

2.02 REINFORCEMENT MATERIALS

A. Comply with requirements of Section 032000.

2.03 CONCRETE MATERIALS

A. Cement: ASTM C150/C150M, Type I - Normal, Type II - Moderate, or Type I/II - Blended
   1. Acquire cement for entire project from same source.

B. Fine and Coarse Aggregates: ASTM C33/C33M.
   1. Acquire aggregates for entire project from same source.

C. Fly Ash: ASTM C618, Class C or F.

D. Silica Fume: ASTM C1240, proportioned in accordance with ACI 211.1.

E. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to concrete.

2.04 ADMIXTURES

A. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.

B. Air Entrainment Admixture: ASTM C260/C260M.

C. High Range Water Reducing and Retarding Admixture: ASTM C494/C494M Type G.

D. High Range Water Reducing Admixture: ASTM C494/C494M Type F.

E. Water Reducing and Accelerating Admixture: ASTM C494/C494M Type E.

F. Water Reducing and Retarding Admixture: ASTM C494/C494M Type D.

G. Accelerating Admixture: ASTM C494/C494M Type C.

H. Retarding Admixture: ASTM C494/C494M Type B.

I. Water Reducing Admixture: ASTM C494/C494M Type A.

2.05 ACCESSORY MATERIALS

A. Underslab Vapor Retarder:
   1. Sheet Material: ASTM E1745, Class A; stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. Single ply polyethylene is prohibited.
   2. Accessory Products: Vapor retarder manufacturer's recommended tape, adhesive, mastic, prefabricated boots, etc., for sealing seams and penetrations.

B. Non-Shrink Cementitious Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
   1. Grout: Comply with ASTM C1107/C1107M.
   2. Height Change, Plastic State; when tested in accordance with ASTM C827/C827M:
      a. Maximum: Plus 4 percent.

b. Minimum: Plus 1 percent.
3. Minimum Compressive Strength at 48 Hours: 2,000 pounds per square inch.
4. Minimum Compressive Strength at 28 Days: 7,000 pounds per square inch.

2.06 BONDING AND JOINTING PRODUCTS

A. Latex Bonding Agent: Non-redispersable acrylic latex, complying with ASTM C1059/C1059M, Type II.

B. Epoxy Bonding System:
1. Complying with ASTM C881/C881M and of Type required for specific application.

C. Waterstops: Rubber, complying with COE CRD-C 513.

D. Waterstops: Bentonite and butyl rubber, complying with NSF 61 and NSF 372.

E. Slab Isolation Joint Filler: 1/2 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal.

F. Slab Contraction Joint Device: Preformed linear strip intended for pressing into wet concrete to provide straight route for shrinkage cracking.

2.07 CURING MATERIALS

A. Evaporation Reducer: Liquid thin-film-forming compound that reduces rapid moisture loss caused by high temperature, low humidity, and high winds; intended for application immediately after concrete placement.

B. Curing Compound, Naturally Dissipating: Clear, water-based, liquid membrane-forming compound; complying with ASTM C309.

C. Curing and Anti-Spalling Compound: Boiled linseed oil compound.

D. Curing and Sealing Compound, Moisture Emission-Reducing, Membrane-Forming: Liquid, membrane-forming, clear sealer, for application to newly-placed concrete; capable of providing adequate bond for flooring adhesives, initially and over the long term; with sufficient moisture vapor impermeability to prevent deterioration of flooring adhesives due to moisture emission.
1. Use this product to cure and seal all slabs to receive adhesively applied flooring or roofing.
2. Comply with ASTM C309 and ASTM C1315 Type I Class A.
3. VOC Content: Less than 100 g/L.

E. Moisture-Retaining Sheet: ASTM C171.

F. Polyethylene Film: ASTM D2103, 4 mil, 0.004 inch thick, clear.

G. Water: Potable, not detrimental to concrete.

2.08 CONCRETE MIX DESIGN

A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.

B. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI 301.
1. For trial mixtures method, employ independent testing agency acceptable to Architect or Engineer for preparing and reporting proposed mix designs.

C. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended or required by manufacturer.

D. Normal Weight Concrete:
1. Compressive Strength, when tested in accordance with ASTM C39/C39M at 28 days: As indicated on drawings.
2. Water-Cement Ratio: Maximum 40 percent by weight.
3. Maximum Aggregate Size: 5/8 inch.

2.09 MIXING

A. On Project Site: Mix in drum type batch mixer, complying with ASTM C685/C685M. Mix each batch not less than 1-1/2 minutes and not more than 5 minutes.

B. Transit Mixers: Comply with ASTM C94/C94M.

C. Adding Water: If concrete arrives on-site with slump less than suitable for placement, do not add water that exceeds the maximum water-cement ratio or exceeds the maximum permissible slump.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION

A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.

B. Verify that forms are clean and free of rust before applying release agent.

C. Coordinate placement of embedded items with erection of concrete formwork and placement of form accessories.

D. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning and applying bonding agent in according to bonding agent manufacturer's instructions.
   1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
   2. Use latex bonding agent only for non-load-bearing applications.

E. Interior Slabs on Grade: Install vapor retarder under interior slabs on grade. Comply with ASTM E1643. Lap joints minimum 6 inches. Seal joints, seams and penetrations watertight with manufacturer's recommended products and follow manufacturer's written instructions. Repair damaged vapor retarder before covering.

3.03 PLACING CONCRETE

A. Place concrete in accordance with ACI 304R.

B. Place concrete for floor slabs in accordance with ACI 302.1R.

C. Notify Architect or Engineer not less than 24 hours prior to commencement of placement operations.

D. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

E. Ensure reinforcement, inserts, waterstops, embedded parts, and formed construction joint devices will not be disturbed during concrete placement.

F. Place concrete continuously without construction (cold) joints wherever possible; where construction joints are necessary, before next placement prepare joint surface by removing laitance and exposing the sand and sound surface mortar, by sandblasting or high-pressure water jetting.

G. Finish floors level and flat, unless otherwise indicated, within the tolerances specified below.

3.04 SLAB JOINTING

A. Locate joints as indicated on drawings.

B. Anchor joint fillers and devices to prevent movement during concrete placement.

C. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.

3.05 FLOOR FLATNESS AND LEVELNESS TOLERANCES

A. Maximum Variation of Surface Flatness:
   1. Exposed Concrete Floors: 1/4 inch in 10 feet.
   2. Under Seamless Resilient Flooring: 1/4 inch in 10 feet.
   3. Under Carpeting: 1/4 inch in 10 feet.

B. Correct the slab surface if tolerances are less than specified.

C. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

3.06 CONCRETE FINISHING

A. Repair surface defects, including tie holes, immediately after removing formwork.

B. Unexposed Form Finish: Rub down or chip off fins or other raised areas 1/4 inch or more in height.

C. Exposed Form Finish: Rub down or chip off and smooth fins or other raised areas 1/4 inch or more in height. Provide finish as follows:

D. Concrete Slabs: Finish to requirements of ACI 302.1R, and as follows:
   1. Surfaces to Receive Thin Floor Coverings: "Steel trowel" as described in ACI 302.1R; thin floor coverings include carpeting, resilient flooring, seamless flooring, resinous matrix terrazzo, thin set quarry tile, and thin set ceramic tile.
   2. Other Surfaces to Be Left Exposed: Trowel as described in ACI 302.1R, minimizing burnish marks and other appearance defects.

E. In areas with floor drains, maintain floor elevation at wwlls; pitch surfaces uniformly to drains at 1:100 nominal, unless indicated otherwise on drawings.

3.07 CURING AND PROTECTION

A. Comply with requirements of ACI 308R. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.

B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

C. Formed Surfaces: Cure by moist curing with forms in place for full curing period.

D. Surfaces Not in Contact with Forms:
   1. Slabs and Floors To Receive Adhesive-Applied Flooring: Curing compounds and other surface coatings are usually considered unacceptable by flooring and adhesive manufacturers. If such materials must be used, either obtain the approval of the flooring and adhesive manufacturers prior to use or remove the surface coating after curing to flooring manufacturer's satisfaction.
   2. Initial Curing: Start as soon as free water has disappeared and before surface is dry. Keep continuously moist for not less than three days by water ponding, water-saturated sand, water-fog spray, or saturated burlap.
   3. Final Curing: Begin after initial curing but before surface is dry.

3.08 FIELD QUALITY CONTROL

A. An independent testing agency will perform field quality control tests.

B. Provide free access to concrete operations at project site and cooperate with appointed firm.

C. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.

D. Tests of concrete and concrete materials may be performed at any time to ensure compliance with specified requirements.

E. Compressive Strength Tests: ASTM C39/C39M, for each test, mold and cure three concrete test cylinders. Obtain test samples for every 100 cubic yards or less of each class of concrete placed.

F. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.

G. Perform one slump test for each set of test cylinders taken, following procedures of ASTM C143/C143M.

3.09 DEFECTIVE CONCRETE

A. Test Results: The testing agency shall report test results in writing to Architect or Engineer and Contractor within 24 hours of test.

B. Defective Concrete: Concrete not complying with required lines, details, dimensions, tolerances or specified requirements.

C. Repair or replacement of defective concrete will be determined by the Architect or Engineer. The cost of additional testing shall be borne by Contractor when defective concrete is identified.

D. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect or Engineer for each individual area.

3.10 PROTECTION

A. Do not permit traffic over unprotected concrete floor surface until fully cured.

END OF SECTION

SECTION 040511
MORTAR AND MASONRY GROUT

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Mortar for masonry.

B. Grout for masonry.

1.02 RELATED REQUIREMENTS

A. Section 042000 - Unit Masonry: Installation of mortar and grout.

1.03 REFERENCE STANDARDS

A. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2016.

B. ASTM C5 - Standard Specification for Quicklime for Structural Purposes; 2018.

C. ASTM C91/C91M - Standard Specification for Masonry Cement; 2018.

D. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2020.

E. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2018.

F. ASTM C150/C150M - Standard Specification for Portland Cement; 2020.

G. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes; 2018.

H. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2019.

I. ASTM C387/C387M - Standard Specification for Packaged, Dry, Combined Materials for Concrete and High Strength Mortar; 2017.

J. ASTM C404 - Standard Specification for Aggregates for Masonry Grout; 2018.

K. ASTM C476 - Standard Specification for Grout for Masonry; 2020.

L. ASTM C780 - Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry; 2019.

M. ASTM C1019 - Standard Test Method for Sampling and Testing Grout for Masonry; 2019.

N. ASTM C1072 - Standard Test Methods for Measurement of Masonry Flexural Bond Strength; 2019.

O. ASTM C1142 - Standard Specification for Extended Life Mortar for Unit Masonry; 1995 (Reapproved 2013).

P. ASTM C1314 - Standard Test Method for Compressive Strength of Masonry Prisms; 2018.

Q. ASTM E518/E518M - Standard Test Methods for Flexural Bond Strength of Masonry; 2015.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Include design mix and indicate whether the Proportion or Property specification of ASTM C270 is to be used. Also include required environmental conditions and admixture limitations.

C. Reports: Submit reports on mortar indicating compliance of mortar to property requirements of ASTM C270 and test and evaluation reports per ASTM C780.

D. Reports: Submit reports on grout indicating compliance of component grout materials to requirements of ASTM C476 and test and evaluation reports to requirements of ASTM C1019.

E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.05 QUALITY ASSURANCE

A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.

1.06 FIELD CONDITIONS

A. Cold and Hot Weather Requirements: Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

PART 2 PRODUCTS

2.01 MORTAR AND GROUT APPLICATIONS

A. At Contractor's option, mortar and grout may be field-mixed from packaged dry materials, made from factory premixed dry materials with addition of water only, or ready-mixed.

B. Mortar Color: Natural gray unless otherwise indicated.

C. Mortar Mix Designs: ASTM C270, Property Specification.
   1. Masonry below grade and in contact with earth: Type S.
   2. Engineered Masonry: Type M.

2.02 MATERIALS

A. Packaged Dry Material for Mortar for Unit Masonry: Premixed Portland cement, hydrated lime, and sand; complying with ASTM C387/C387M and capable of producing mortar of the specified strength in accordance with ASTM C270 with the addition of water only.
   1. Color: Standard gray.

B. Packaged Dry Material for Grout for Masonry: Premixed cementitious materials and dried aggregates; capable of producing grout of the specified strength in accordance with ASTM C476 with the addition of water only.

C. Portland Cement: ASTM C150/C150M.
   1. Type: Type I - Normal; ASTM C150/C150M.
   2. Color: Standard gray.

D. Masonry Cement: ASTM C91/C91M.
   1. Type: Type N; ASTM C91/C91M.

E. Hydrated Lime: ASTM C207, Type S.

F. Quicklime: ASTM C5, non-hydraulic type.

G. Mortar Aggregate: ASTM C144.

H. Grout Aggregate: ASTM C404.

I. Water: Clean and potable.

J. Bonding Agent: Latex type.

2.03 MORTAR MIXING

A. Ready Mixed Mortar: ASTM C1142, Type equivalent to that specified according to ASTM C270.

B. Thoroughly mix mortar ingredients using mechanical batch mixer, in accordance with ASTM C270 and in quantities needed for immediate use.

C. Maintain sand uniformly damp immediately before the mixing process.

D. Do not use anti-freeze compounds to lower the freezing point of mortar.

E. If water is lost by evaporation, re-temper only within two hours of mixing.

2.04 GROUT MIXING

A. Mix grout in accordance with ASTM C94/C94M.

B. Thoroughly mix grout ingredients in quantities needed for immediate use in accordance with ASTM C476 for fine and coarse grout.

PART 3 EXECUTION

3.01 PREPARATION

A. Verify that field conditions are acceptable and are ready to receive masonry.

B. Apply bonding agent to existing concrete surfaces.

C. Plug clean-out holes for grouted masonry with brick masonry units. Brace masonry to resist wet grout pressure.

3.02 INSTALLATION

A. Install mortar and grout to requirements of section(s) in which masonry is specified.

B. Work grout into masonry cores and cavities to eliminate voids.

C. Do not install grout in lifts greater than 16 inches without consolidating grout by rodding.

D. Do not displace reinforcement while placing grout.

E. Remove excess mortar from grout spaces.

3.03 GROUTING

A. Use either high-lift or low-lift grouting techniques, at Contractor's option, subject to other limitations of Contract Documents.

B. Low-Lift Grouting:
   1. Limit height of pours to 12 inches.
   2. Limit height of masonry to 16 inches above each pour.
   3. Pour grout only after vertical reinforcing is in place; place horizontal reinforcing as grout is poured. Prevent displacement of bars as grout is poured.
   4. Place grout for each pour continuously and consolidate immediately; do not interrupt pours for more than 1-1/2 hours.

C. High-Lift Grouting:
   1. Verify that horizontal and vertical reinforcement is in proper position and adequately secured before beginning pours.
   2. Hollow Masonry: Limit lifts to maximum 4 feet and pours to maximum height of 24 feet.
   3. Place grout for spanning elements in single, continuous pour.

3.04 FIELD QUALITY CONTROL

A. An independent testing agency will perform field tests, in accordance with provisions of Section 014000 - Quality Requirements.

B. Test and evaluate mortar in accordance with ASTM C780 procedures.

C. Test and evaluate grout in accordance with ASTM C1019 procedures.

D. Prism Tests: Test masonry and mortar panels for compressive strength in accordance with ASTM C1314, and for flexural bond strength in accordance with ASTM C1072 or ASTM E518/E518M; perform tests and evaluate results as specified in individual masonry sections.

END OF SECTION

SECTION 042000
UNIT MASONRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete block.

B. Mortar and grout.

C. Reinforcement and anchorage.

D. Accessories.

1.02 RELATED REQUIREMENTS

A. Section 032000 - Concrete Reinforcing: Reinforcing steel for grouted masonry.

B. Section 040511 - Mortar and Masonry Grout.

1.03 REFERENCE STANDARDS

A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.

B. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2020.

C. ASTM A641/A641M - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire; 2019.

D. ASTM A951/A951M - Standard Specification for Steel Wire for Masonry Joint Reinforcement; 2016, with Editorial Revision (2018).

E. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2018a.

F. ASTM C90 - Standard Specification for Loadbearing Concrete Masonry Units; 2016a.

G. ASTM C129 - Standard Specification for Nonloadbearing Concrete Masonry Units; 2017.

H. ASTM C140/C140M - Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units; 2020.

I. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2018.

J. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2019.

K. ASTM C780 - Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry; 2019.

L. BIA Technical Notes No. 7 - Water Penetration Resistance – Design and Detailing; 2017.

M. BIA Technical Notes No. 13 - Ceramic Glazed Brick Exterior Walls; 2017.

N. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2016.

1.04 SUBMITTALS

A. Product Data: Provide data for masonry units, fabricated wire reinforcement, mortar, and masonry accessories.

B. Shop Drawings: Indicate pertinent dimensions, materials, anchorage, size and type of fasteners, and accessories for brickwork support system.

C. Manufacturer's Certificate: Certify that masonry units meet or exceed specified requirements.

D. Test Reports: Concrete masonry manufacturer's test reports for units with integral water repellent admixture.

1.05 QUALITY ASSURANCE

A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.

PART 2 PRODUCTS

2.01 CONCRETE MASONRY UNITS

A. Concrete Block: Comply with referenced standards and as follows:
   1. Size: Standard units with nominal face dimensions of 16 by 8 inches and nominal depths as indicated on drawings for specific locations.
   2. Special Shapes: Provide non-standard blocks configured for corners.
   3. Load-Bearing Units: ASTM C90, normal weight.
      a. Hollow block, as indicated.
   4. Non-Loadbearing Units: ASTM C129.
      a. Hollow block, as indicated.
      b. Lightweight.

2.02 MORTAR AND GROUT MATERIALS

A. Mortar and Grout: As specified in Section 040511.

2.03 REINFORCEMENT AND ANCHORAGE

A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi), deformed billet bars; galvanized.

B. Joint Reinforcement: Use ladder type joint reinforcement where vertical reinforcement is involved and truss type elsewhere, unless otherwise indicated.

C. Single Wythe Joint Reinforcement: ASTM A951/A951M.
   1. Material: ASTM A1064/A1064M steel wire, mill galvanized to ASTM A641/A641M, Class 3.
   2. Size: 0.1875 inch side rods with 0.1875 inch cross rods; width as required to provide not less than 5/8 inch of mortar coverage on each exposure.

D. Masonry Veneer Anchors: 2-piece anchors that permit differential movement between masonry veneer and structural backup, hot dip galvanized to ASTM A 153/A 153M, Class B.
   1. Anchor plates: Not less than 0.075 inch thick, designed for fastening to structural backup through sheathing by two fasteners; provide design with legs that penetrate sheathing and insulation to provide positive anchorage.
   2. Wire ties: Manufacturer's standard shape, 0.1875 inch thick.
   3. Vertical adjustment: Not less than 3-1/2 inches.

2.04 ACCESSORIES

A. Preformed Control Joints: Rubber material. Provide with corner and tee accessories, fused joints.

B. Joint Filler: Closed cell polyvinyl chloride; oversized 50 percent to joint width; self expanding; in maximum lengths available.

C. Cavity Mortar Control: Semi-rigid polyethylene or polyester mesh panels, sized to thickness of wall cavity, and designed to prevent mortar droppings from clogging weeps and cavity vents and allow proper cavity drainage.

D. Weeps:
   1. Type: Polyester mesh.
   2. Color(s): As indicated on drawings.

E. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive masonry.

B. Verify that related items provided under other sections are properly sized and located.

C. Verify that built-in items are in proper location, and ready for roughing into masonry work.

3.02 PREPARATION

A. Direct and coordinate placement of metal anchors supplied for installation under other sections.

B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.03 COLD AND HOT WEATHER REQUIREMENTS

A. Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

3.04 COURSING

A. Establish lines, levels, and coursing indicated. Protect from displacement.

B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.

C. Concrete Masonry Units:
   1. Bond: Running.
   2. Coursing: One unit and one mortar joint to equal 8 inches.
   3. Mortar Joints: Concave.

3.05 PLACING AND BONDING

A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.

B. Lay hollow masonry units with face shell bedding on head and bed joints.

C. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.

D. Remove excess mortar and mortar smears as work progresses.

E. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.

F. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

3.06 WEEPS/CAVITY VENTS

A. Install weeps in veneer and cavity walls at 24 inches on center horizontally on top of through-wall flashing above shelf angles and lintels and at bottom of walls.

3.07 CAVITY MORTAR CONTROL

A. Do not permit mortar to drop or accumulate into cavity air space or to plug weep/cavity vents.

3.08 REINFORCEMENT AND ANCHORAGE - MASONRY VENEER

A. Masonry Back-Up: Embed anchors to bond veneer at maximum 16 inches on center vertically and 36 inches on center horizontally. Place additional anchors at perimeter of openings and ends of panels, so maximum spacing of anchors is 8 inches on center.

B. Stud Back-Up: Secure veneer anchors to stud framed back-up and embed into masonry veneer at maximum 16 inches on center vertically and 24 inches on center horizontally. Place additional anchors at perimeter of openings and ends of panels, so maximum spacing of anchors is 8 inches on center.

3.09 MASONRY FLASHINGS

A. Whether or not specifically indicated, install masonry flashing to divert water to exterior at all locations where downward flow of water will be interrupted.

3.10 GROUTED COMPONENTS

A. Lap splices minimum 24 bar diameters.

B. Support and secure reinforcing bars from displacement. Maintain position within 1/2 inch of dimensioned position.

C. Place and consolidate grout fill without displacing reinforcing.

3.11 CONTROL AND EXPANSION JOINTS

A. Do not continue horizontal joint reinforcement through control or expansion joints.

B. Install preformed control joint device in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions.

C. Form expansion joint as detailed on drawings.

3.12 BUILT-IN WORK

A. As work progresses, install built-in metal door frames and glazed frames and other items to be built into the work and furnished under other sections.

B. Install built-in items plumb, level, and true to line.

C. Do not build into masonry construction organic materials that are subject to deterioration.

3.13 TOLERANCES

A. Install masonry within the site tolerances found in TMS 402/602.

B. Maximum Variation From Unit to Adjacent Unit: 1/16 inch.

C. Maximum Variation from Plane of Wall: 1/4 inch in 10 ft and 1/2 inch in 20 ft or more.

D. Maximum Variation from Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.

E. Maximum Variation from Level Coursing: 1/8 inch in 3 ft and 1/4 inch in 10 ft; 1/2 inch in 30 ft.

F. Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 inch.

G. Maximum Variation from Cross Sectional Thickness of Walls: 1/4 inch.

3.14 CUTTING AND FITTING

3.15 FIELD QUALITY CONTROL

A. An independent testing agency will perform field quality control tests, as specified in Section 014000 - Quality Requirements.

B. Concrete Masonry Unit Tests: Test each variety of concrete unit masonry in accordance with ASTM C140/C140M for compliance with requirements of this specification.

C. Mortar Tests: Test each type of mortar in accordance with ASTM C780, testing with same frequency as masonry samples.

3.16 CLEANING

A. Remove excess mortar and mortar droppings.

B. Replace defective mortar. Match adjacent work.

C. Clean soiled surfaces with cleaning solution.

D. Use non-metallic tools in cleaning operations.

3.17 PROTECTION

A. Without damaging completed work, provide protective boards at exposed external corners that are subject to damage by construction activities.

END OF SECTION

SECTION 051200
STRUCTURAL STEEL FRAMING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Structural steel framing members.

B. Base plates, shear stud connectors and expansion joint plates.

C. Grouting under base plates.

1.02 RELATED REQUIREMENTS

A. Section 053100 - Steel Decking: Support framing for small openings in deck.

1.03 REFERENCE STANDARDS

A. AISC (MAN) - Steel Construction Manual; 2017.

B. AISC 303 - Code of Standard Practice for Steel Buildings and Bridges; 2016.

C. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.

D. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless; 2018.

E. ASTM A108 - Standard Specification for Steel Bar, Carbon and Alloy, Cold Finished; 2018.

F. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.

G. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength; 2014, with Editorial Revision (2017).

H. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2020.

I. ASTM A501/A501M - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing; 2014.

J. ASTM A563 - Standard Specification for Carbon and Alloy Steel Nuts; 2015.

K. ASTM A563M - Standard Specification for Carbon and Alloy Steel Nuts (Metric); 2007 (Reapproved 2013).

L. ASTM A992/A992M - Standard Specification for Structural Steel Shapes; 2011 (Reapproved 2015).

M. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2018a.

N. ASTM C827/C827M - Standard Test Method for Change in Height at Early Ages of Cylindrical Specimens of Cementitious Mixtures; 2016.

O. ASTM E164 - Standard Practice for Contact Ultrasonic Testing of Weldments; 2019.

P. ASTM F3125/F3125M - Standard Specification for High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength; 2019.

Q. ASTM F436/F436M - Standard Specification for Hardened Steel Washers Inch and Metric Dimensions; 2019.

R. ASTM F1554 - Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength; 2018.

S. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination; 2012.

T. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2015, with Errata (2016).

U. RCSC (HSBOLT) - Specification for Structural Joints Using High-Strength Bolts; Research Council on Structural Connections; 2014, with Errata (2015).

V. SSPC-Paint 15 - Steel Joist Shop Primer/Metal Building Primer; 1999 (Ed. 2004).

1.04 SUBMITTALS

A. Shop Drawings:
   1. Indicate profiles, sizes, spacing, locations of structural members, openings, attachments, and fasteners.
   2. Indicate welded connections with AWS A2.4 welding symbols. Indicate net weld lengths.

B. Manufacturer's Mill Certificate: Certify that products meet or exceed specified requirements.

C. Fabricator Test Reports: Comply with ASTM A1011/A1011M.

D. Welders Certificates: Certify welders employed on the Work, verifying AWS qualification within the previous 12 months.

1.05 QUALITY ASSURANCE

A. Fabricate structural steel members in accordance with AISC (MAN) "Steel Construction Manual."

B. Design connections not detailed on drawings under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State in which the Project is located.

PART 2 PRODUCTS

2.01 MATERIALS

A. Steel Angles and Plates: ASTM A36/A36M.

B. Steel W Shapes and Tees: ASTM A992/A992M.

C. Rolled Steel Structural Shapes: ASTM A992/A992M.

D. Cold-Formed Structural Tubing: ASTM A500/A500M, Grade B.

E. Hot-Formed Structural Tubing: ASTM A501/A501M, seamless or welded.

F. Pipe: ASTM A53/A53M, Grade B, Finish black.

G. Shear Stud Connectors: Made from ASTM A108 Grade 1015 bars.

H. Structural Bolts and Nuts: Carbon steel, ASTM A307, Grade A and galvanized in compliance with ASTM A153/A153M, Class C.

I. High-Strength Structural Bolts, Nuts, and Washers: ASTM F3125/F3125M, Type 1, with matching compatible ASTM A563 or ASTM A563M nuts and ASTM F436/F436M washers.

J. Tension Control Bolts: Twist-off type; ASTM F3125/F3125M.

K. Unheaded Anchor Rods: ASTM F1554, Grade 36, plain, with matching ASTM A563 or ASTM A563M nuts and ASTM F436/F436M Type 1 washers.

L. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded.

M. Grout: ASTM C1107/C1107M; Non-shrink; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
   1. Minimum Compressive Strength at 48 Hours: 2,000 pounds per square inch.
   2. Minimum Compressive Strength at 28 Days: 7,000 pounds per square inch.
   3. Height Change, Plastic State; when tested according to ASTM C827/C827M:
      a. Maximum: Plus 4 percent.
      b. Minimum: Plus 1 percent.

N. Shop and Touch-Up Primer: Fabricator's standard, complying with VOC limitations of authorities having jurisdiction.

O. Touch-Up Primer for Galvanized Surfaces: Fabricator's standard, complying with VOC limitations of authorities having jurisdiction.

2.02 FABRICATION

A. Shop fabricate to greatest extent possible.

B. Continuously seal joined members by continuous welds. Grind exposed welds smooth.

C. Fabricate connections for bolt, nut, and washer connectors.

2.03 FINISH

A. Shop prime structural steel members. Do not prime surfaces that will be fireproofed, field welded, in contact with concrete, or high strength bolted.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that conditions are appropriate for erection of structural steel and that the work may properly proceed.

3.02 ERECTION

A. Erect structural steel in compliance with AISC 303.

B. Allow for erection loads and provide sufficient temporary bracing to maintain structure in safe condition, plumb, and in true alignment until completion of erection and installation of permanent bracing.

C. Field weld components and shear studs indicated on shop drawings.

D. Use carbon steel bolts only for temporary bracing during construction, unless otherwise specifically permitted on drawings. Install high-strength bolts in accordance with RCSC (HSBOLT) "Specification for Structural Joints Using High-Strength Bolts".

E. Do not field cut or alter structural members without approval of Architect or Engineer.

F. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.

G. Grout solidly between column plates and bearing surfaces, complying with manufacturer's instructions for nonshrink grout. Trowel grouted surfaces smooth, splaying neatly to 45 degrees.

3.03 TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch.

3.04 FIELD QUALITY CONTROL

A. An independent testing agency will perform field quality control tests, as specified in Section 014000 - Quality Requirements.

END OF SECTION

SECTION 053100
STEEL DECKING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Roof deck.

B. Supplementary framing for openings up to and including 18 inches.

C. Bearing plates and angles.

1.02 RELATED REQUIREMENTS

A. Section 051200 - Structural Steel Framing: Support framing for openings larger than 18 inches and shear stud connectors.

B. Section 051200 - Structural Steel Framing: Placement of embedded steel anchors for bearing plates in cast-in-place concrete.

C. Section 052100 - Steel Joist Framing: Support framing for openings larger than 18 inches and shear stud connectors.

D. Section 052100 - Steel Joist Framing: Placement of embedded steel anchors for bearing plates and joist seats in cast-in-place concrete.

1.03 REFERENCE STANDARDS

A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.

B. ASTM A510/A510M - Standard Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel, and Alloy Steel; 2018.

C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2020.

D. ASTM B633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel; 2019.

E. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2015, with Errata (2016).

F. AWS D1.3/D1.3M - Structural Welding Code - Sheet Steel; 2018.

G. ICC-ES AC43 - Acceptance Criteria for Steel Deck Roof and Floor Systems; 2016.

H. ICC-ES AC70 - Acceptance Criteria for Fasteners Power Driven into Concrete, Steel and Masonry Elements; 2016.

I. SDI (DM) - Publication No.30, Design Manual for Composite Decks, Form Decks, and Roof Decks; 2007.

J. SSPC-Paint 15 - Steel Joist Shop Primer/Metal Building Primer; 1999 (Ed. 2004).

K. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); 2002 (Ed. 2004).

1.04 SUBMITTALS

A. Product Data: Provide deck profile characteristics, dimensions, structural properties, and finishes.

B. Shop Drawings: Indicate deck plan, support locations, projections, openings, reinforcement, pertinent details, and accessories.

C. Certificates: Certify that products furnished meet or exceed specified requirements.

D. Submit manufacturer's installation instructions.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Cut plastic wrap to encourage ventilation.

B. Separate sheets and store deck on dry wood sleepers; slope for positive drainage.

PART 2 PRODUCTS

2.01 STEEL DECK

A. Roof Deck: Non-composite type, fluted steel sheet:
   1. Galvanized Steel Sheet: ASTM A653/A653M, Structural Steel (SS) Grade 33/230, with G90/Z275 galvanized coating.
   2. Primer: Shop coat of manufacturer's standard primer paint over cleaned and phosphatized substrate.

2.02 ACCESSORY MATERIALS

A. Bearing Plates and Angles: ASTM A36/A36M steel, galvanized per ASTM A123/A123M.

B. Welding Materials: AWS D1.1/D1.1M.

C. Fasteners: Galvanized hardened steel, self tapping.

D. Powder Actuated Mechanical Fasteners: Steel; with knurled shank and forged ballistic point. Comply with applicable requirements of ICC-ES AC70.
   1. Design Requirements: Provide number and type of fasteners that comply with the applicable requirements of SDI (DM) design method for roof deck and floor deck applications and ICC-ES AC43.
   2. Material: Steel; ASTM A510/A510M.

E. Mechanical Fasteners: Steel; hex washer head, self-drilling, self-tapping.
   1. Fasteners for Steel Roof Decks Protected with Waterproofing Membrane: ASTM B633, SC1, Type III zinc electroplate.
   2. Fasteners for Exposed Steel Roof Deck Application: Manufacturer's standard stainless steel with bonded neoprene washer.

F. Weld Washers: Mild steel, uncoated, 3/4 inch outside diameter, 1/8 inch thick.

G. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.

H. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, complying with VOC limitations of authorities having jurisdiction.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions prior to beginning work.

3.02 INSTALLATION

A. Erect metal deck in accordance with SDI Design Manual and manufacturer's instructions. Align and level.

B. On concrete and masonry surfaces provide minimum 4 inch bearing.

C. On steel supports provide minimum 1-1/2 inch bearing.

D. Fasten deck to steel support members at ends and intermediate supports at 12 inches on center maximum, parallel with the deck flute and at each transverse flute using methods specified.

E. At mechanically fastened male/female side laps fasten at 24 inches on center maximum.

F. Drive mechanical sidelap connectors completely through adjacent lapped sheets; positively engage adjacent sheets with minimum three-thread penetration.

G. At welded male/female side laps weld at 18 inches on center maximum.

H. Weld deck in accordance with AWS D1.3/D1.3M.

I. At deck openings from 6 inches to 18 inches in size, provide 2 by 2 by 1/4 inch steel angle reinforcement. Place angles perpendicular to flutes; extend minimum two flutes beyond each side of opening and fusion weld to deck at each flute.

J. At deck openings greater than 18 inches in size, provide steel angle reinforcement. as specified in Section 051200.

K. Where deck (other than cellular deck electrical raceway) changes direction, install 6 inch minimum wide sheet steel cover plates, of same thickness as deck. Fusion weld 12 inches on center maximum.

L. At floor edges, install concrete stops upturned to top surface of slab, to contain wet concrete. Provide stops of sufficient strength to remain stationary without distortion.

M. At openings between deck and walls, columns, and openings, provide sheet steel closures and angle flashings to close openings.

N. Position roof drain pans with flange bearing on top surface of deck. Fusion weld at each deck flute.

O. Immediately after welding deck and other metal components in position, coat welds, burned areas, and damaged surface coating, with touch-up primer.

END OF SECTION

SECTION 000110
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END OF SECTION

SECTION 055000
METAL FABRICATIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Shop fabricated steel items.

B. Steel framing and supports for mechanical and electrical equipment.

C. Shelf angles

1.02 RELATED REQUIREMENTS

A. Section 042000 - Unit Masonry: Placement of metal fabrications in masonry.

B. Section 099113 - Exterior Painting: Paint finish.

C. Section 099123 - Interior Painting: Paint finish.

1.03 REFERENCE STANDARDS

A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel 2019.

B. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless 2020.

C. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products 2017.

D. ASTM A283/A283M - Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates 2018.

E. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength 2021.

F. ASTM A501/A501M - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing 2021.

G. ASTM F3125/F3125M - Standard Specification for High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength 2021.

H. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination 2020.

I. AWS D1.1/D1.1M - Structural Welding Code - Steel 2020, with Errata (2021).

J. IAS AC172 - Accreditation Criteria for Fabricator Inspection Programs for Structural Steel AC172 2019.

K. SSPC-Paint 20 - Zinc-Rich Coating (Type I - Inorganic, and Type II - Organic) 2019.

L. SSPC-SP 2 - Hand Tool Cleaning 2018.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.

1. Indicate welded connections using standard AWS A2.4 welding symbols. Indicate net weld lengths.

C. Welders' Certificates: Submit certification for welders employed on the project, verifying AWS qualification within the previous 12 months.

D. Fabricator's Qualification Statement: Provide documentation showing steel fabricator is accredited under IAS AC172.

1.05 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel".

B. Project Conditions: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication.

PART 2 PRODUCTS

2.01 MATERIALS - STEEL

A. Steel Sections: ASTM A36/A36M.

B. Steel Tubing: ASTM A501/A501M hot-formed structural tubing.

C. Plates: ASTM A283/A283M.

D. Pipe: ASTM A53/A53M, Grade B Schedule 40, black finish.

E. Bolts, Nuts, and Washers: ASTM A307, Grade A, plain.

F. Bolts, Nuts, and Washers: ASTM F3125/F3125M, Type 1, plain.

G. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded.

H. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.

2.02 FABRICATION

A. Fit and shop assemble items in largest practical sections, for delivery to site.

B. Fabricate items with joints tightly fitted and secured.

C. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

D. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

2.03 FABRICATED ITEMS

A. Lintels: As detailed; galvanized finish.
   1. All lintels supporting masonry veneer and CMU systems shall be shop galvanized and field painted to match adjacent masonry color.

2.04 MISCELLANEOUS FRAMING AND SUPPORTS

A. General: Provide steel framing and supports not specified in other Sections as needed to complete the work.

B. Fabricate units from steel shapes, plates and bars of welded construction unless otherwise indicated.

C. Miscellaneous framing and supports shall be shop galvanized.

2.05 SHELF ANGLES

A. Fabricate shelf angles from steel angles of sizes indicated and for both loose laid installation and attachment to wood framing. Where attached, provide horizontally slotted holes to receive 3/4-inch (19-mm) bolts, spaced not more than 6 inches (150 mm) from ends and 24 inches (600 mm) o.c., unless otherwise indicated.

B. Galvanize shelf angles in exterior walls.
   1. All lintels supporting masonry veneer and CMU systems shall be shop galvanized and field painted to match adjacent masonry color.

2.06 FINISHES - STEEL

A. Prepare surfaces to be primed in accordance with SSPC-SP2.

B. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.

C. Galvanizing of Structural Steel Members: Galvanize after fabrication to ASTM A123/A123M requirements. Provide minimum 1.7 oz/sq ft galvanized coating. (Provide minimum 530 g/sq m galvanized coating.)

D. Galvanizing of Non-structural Items: Galvanize after fabrication to ASTM A123/A123M requirements.

2.07 FABRICATION TOLERANCES

A. Squareness: 1/8 inch (3 mm) maximum difference in diagonal measurements.

B. Maximum Offset Between Faces: 1/16 inch (1.5 mm).

C. Maximum Misalignment of Adjacent Members: 1/16 inch (1.5 mm).

D. Maximum Bow: 1/8 inch (3 mm) in 48 inches (1.2 m).

E. Maximum Deviation From Plane: 1/16 inch (1.5 mm) in 48 inches (1.2 m).

PART 3 EXECUTION

3.01 PREPARATION

A. Clean and strip primed steel items to bare metal where site welding is required.
   1. After completion of welding, bare steel shall be field galvanized as required to meet the hot dipped galvanized performance.

B. Supply setting templates to the appropriate entities for steel items required to be cast into concrete or embedded in masonry.

3.02 INSTALLATION

A. Install items plumb and level, accurately fitted, free from distortion or defects.

B. All items shall be installed in strict accordance with manufacturers written recommendations.

C. Provide for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.

D. Obtain approval prior to site cutting or making adjustments not scheduled.

3.03 TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch (6 mm) per story, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch (6 mm).

C. Maximum Out-of-Position: 1/4 inch (6 mm).

END OF SECTION

SECTION 061000
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Roofing nailers.

B. Preservative treated wood materials.

1.02 RELATED REQUIREMENTS

A. Section 076200 - Sheet Metal Flashing and Trim: Sill flashings.

1.03 REFERENCE STANDARDS

A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2021a.

B. AWPA U1 - Use Category System: User Specification for Treated Wood 2021.

C. PS 20 - American Softwood Lumber Standard 2020.

D. SPIB (GR) - Grading Rules 2014.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

1.05 QUALITY ASSURANCE

1.06 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
   1. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.
   2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

B. Lumber fabricated from old growth timber is not permitted.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. Grading Agency: Southern Pine Inspection Bureau, Inc; SPIB (GR).

B. Sizes: Nominal sizes as indicated on drawings, S4S.

C. Moisture Content: Kiln-dry or MC15.

D. Stud Framing (2 by 2 through 2 by 6 (50 by 50 mm through 50 by 150 mm)):
   1. Species: Douglas Fir-Larch.
   2. Grade: No. 1.

E. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
   1. Lumber: S4S, No. 1 or Construction Grade.
   2. Boards: Standard or No. 3.

2.03 FACTORY WOOD TREATMENT

A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.

1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.

B. Preservative Treatment:
   1. Preservative Pressure Treatment of Lumber Above Grade: AWPA U1, Use Category UC3B, Commodity Specification A using waterborne preservative.
      a. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
      b. Treat lumber in contact with roofing, flashing, or waterproofing.
      c. Treat lumber in contact with masonry or concrete.

PART 3 EXECUTION

3.01 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.

B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.02 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.

C. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.

3.03 ROOF-RELATED CARPENTRY

A. Coordinate installation of roofing carpentry with deck construction, framing of roof openings, and roofing assembly installation.

3.04 CLEANING

A. Waste Disposal: Comply with the requirements of Section 017419 - Construction Waste Management and Disposal.
   1. Comply with applicable regulations.
   2. Do not burn scrap on project site.
   3. Do not burn scraps that have been pressure treated.
   4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or “waste-to-energy” facilities.

B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.

C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION

SECTION 072100
THERMAL INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Board insulation at perimeter foundation wall.

B. Batt insulation for filling crevices in exterior wall and roof.

1.02 RELATED REQUIREMENTS

A. Section 060573 - Wood Treatment: Field-applied termiticide for wood.

B. Section 061000 - Rough Carpentry: Supporting construction for batt insulation.

1.03 REFERENCE STANDARDS

A. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation 2019.

B. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing 2017.

C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2021a.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

1.05 QUALITY ASSURANCE

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Thermal Insulation:

2.02 APPLICATIONS

A. Insulation at Perimeter of Foundation: Extruded polystyrene (XPS) board.

2.03 FOAM BOARD INSULATION MATERIALS

A. Extruded Polystyrene (XPS) Board Insulation: Complies with ASTM C578 with either natural skin or cut cell surfaces.
   1. Flame Spread Index (FSI): Class A - 0 to 25, when tested in accordance with ASTM E84.
   2. Smoke Developed Index (SDI): 450 or less, when tested in accordance with ASTM E84.
   3. Type and Thermal Resistance, R-value (RSI-value): Type IV, 5.0 (0.88) per 1 inch (25.4 mm) thickness at 75 degrees F (24 degrees C) mean temperature.
   4. Board Edges: Square.

2.04 BATT INSULATION MATERIALS

A. Mineral Fiber Batt Insulation: Flexible or semi-rigid preformed batt or blanket, complying with ASTM C665; friction fit; unfaced flame spread index of 0 (zero) when tested in accordance with ASTM E84.
   1. Flame Spread Index: 25 or less, when tested in accordance with ASTM E84.
   2. Smoke Developed Index: 0 (zero), when tested in accordance with ASTM E84.
   3. Thickness: 3 inches.
   4. Manufacturers:
      a. Johns Manville; MinWool Sound Attenuation Fire Batts: www.jm.com/#sle.
      b. Knauf Insulation; EcoBatt Insulation: www.knaufinsulation.com/#sle.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate, adjacent materials, and insulation materials are dry and that substrates are ready to receive insulation.

B. Verify substrate surfaces are flat, free of honeycomb, fins, irregularities, or materials or substances that may impede adhesive bond.

3.02 BOARD INSTALLATION AT FOUNDATION PERIMETER

A. Install boards vertically on foundation perimeter.
   1. Butt edges and ends tightly to adjacent boards and to protrusions.

B. Extend boards over expansion joints, unbonded to foundation on one side of joint.

C. Cut and fit insulation tightly to protrusions or interruptions to the insulation plane.

3.03 BATT INSTALLATION

A. Install insulation in accordance with manufacturer's instructions.

B. Install in exterior wall spaces without gaps or voids. Do not compress insulation.

C. Trim insulation neatly to fit spaces. Insulate miscellaneous gaps and voids.

D. Fit insulation tightly in cavities and tightly to exterior side of mechanical and electrical services within the plane of the insulation.

E. Tape insulation batts in place.

3.04 FIELD QUALITY CONTROL

A. See Section 014000 - Quality Requirements, for additional requirements.

3.05 PROTECTION

A. Do not permit installed insulation to be damaged prior to its concealment.

END OF SECTION

SECTION 076100
SHEET METAL ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Sheet metal roofing, associated flashings, and underlayment.

B. Gutters and downspouts.

C. Integral fascias.

D. Sealants for joints within sheet metal fabrications.

1.02 REFERENCE STANDARDS

A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2020.

B. ASTM C920 - Standard Specification for Elastomeric Joint Sealants 2018.

C. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection 2021.

D. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials 2021.

1.03 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on metal types, finishes, characteristics.

C. Shop Drawings: Indicate material profile, fastening methods, flashings, terminations, and installation details.

D. Color Samples for Sheet Metal Roofing and Roof Screen Panels:
   1. Provide colors as selected by Architect, one for the sheet metal roofing.
   2. Color Selection Samples: Submit selection samples of all available colors and finishes.
   3. Verification Color Samples: Submit two samples in appropriate size illustrating metal finish color.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Stack material to prevent twisting, bending, or abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.

B. Prevent contact with materials that could cause discoloration or staining.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Sheet Metal Roofing Manufacturers:
   1. Berridge Manufacturing Company: Doublelock Zee-Lockwww.berridge.com/#sle
   2. Fabral Metal Wall and Roof Systems: Powerseam II www.fabral.com/#sle
   3. Petersen Aluminum Corporation; Tite-Loc Plus: www.pac-clad.com/#sle.
   4. Sheffield Metals International; SMI 2.0" Mechanicl Seam Panel: www.sheffieldmetals.com/#sle.
   5. Substitutions: See Section 016000 - Product Requirements.
      a. Available colors requirement: Manufacturer shall provide the range of color and finish options described in Subpart 2.04 below.

2.02 SHEET MATERIALS

A. Pre-Finished Galvanized Steel Sheet: ASTM A653/A653M, with G90/Z275 zinc coating; 24 gauge, 0.0239 inch (0.61 mm) minimum base metal thickness, shop pre-coated with PVDF (polyvinylidene fluoride) coating; color as selected.

2.03 FABRICATION OF SHEET METAL ROOFING

A. Form sections true to shape, accurate in size, square, and free from distortion or defects.

B. Fabricate cleats of same material as sheet, thickness to match roofing sheet, and at least 4 inch (101.6 mm) wide, interlockable with sheet.

C. Fabricate starter strips, interlockable with sheet.

D. Form pieces in longest practical lengths.

E. Hem exposed edges on underside 1/2 inch (13 mm); miter and seam corners.

F. Fabricate corners from single piece with minimum 18 inches (457 mm) long legs; seam for rigidity, seal with sealant.

G. Fabricate vertical faces with bottom edge formed outward 1/4 inch (6 mm) and hemmed to form drip.

2.04 FINISHES

A. Architect to select colors from the manufacturer's full range with the following systems:

B. Color: As selected by Architect from manufacturer's full colors.
   1. Manufacturer's full line of colors shall include at least 25 standard solid colors and four metallic colors.

2.05 ACCESSORIES

A. Fasteners: Stainless steel, with soft neoprene washers. All fasteners shall be concealed.

B. Underlayment: Self-adhering butyl-rubber sheet complying with ASTM D1970/D1970M; strippable release film.
   1. Top Sheet: Woven polypropylene top surface.
   2. Sheet Thickness: 40 mil (1 mm), minimum.
   3. Self Sealability: Passing nail sealability test specified in ASTM D1970/D1970M.
   4. Low Temperature Flexibility: Passing test specified in ASTM D1970/D1970M.
   5. Water Vapor Permeance: 0.05 perm (0.30 ng/(Pa s sq m)), maximum, when tested in accordance with ASTM E96/E96M, Procedure A (desiccant method).
   6. Functional Temperature Range: Minus 45 degrees F (42.8 C) to 250 degrees F (121 C).
   7. Ultraviolet (UV) Resistance and Weatherability: Approved in writing by manufacturer for exposure to weather for minimum of three months.
   8. Manufacturers:
      a. GCPT; grace ice and water shield HT: www.gcpt.com.
      b. Protecto Wrap Company; Jiffy Seal Ice and Water Guard HT: www.protectowrap.com/#sle.

C. Concealed Sealants: Non-curing butyl sealant.

D. Exposed Sealants: ASTM C920 elastomeric sealant, with minimum movement capability as recommended by manufacturer for sealed substrates; color to match adjacent material.

PART 3 EXECUTION

3.01 EXAMINATION

A. Inspect roof deck to verify deck is clean and smooth, free of depressions, waves, or projections, properly sloped to gutters.

B. Verify deck is dry and free of snow or ice. Verify joints in wood deck are solidly supported and fastened.

C. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

A. Install starter and edge strips, and cleats before starting installation.

B. Back paint concealed metal surfaces and surfaces in contact with dissimilar metals with protective backing paint to a minimum dry film thickness of 15 mil (0.4 mm).

3.03 INSTALLATION - ROOFING

A. Apply underlayment over entire roof area.

B. Apply slip sheet in one layer, laid loose.

C. Cleat and seam all joints.

D. Use plastic cement for joints between metal and bitumen and for joints between metal and felts.

E. Provide gutters.

3.04 INSTALLATION - STANDING SEAM ROOFING

A. Lay sheets with long dimension perpendicular to eaves. Apply pans beginning at eaves.

B. Lock cleats into seams and flatten.

C. Stagger transverse joints of roofing sheets.

D. At eaves and gable ends, terminate roofing by hooking over edge strip.

E. Bend up one side edge 1-1/2 inches (38 mm) and other edge 1-3/4 inches (44 mm).

F. Make first fold 1/4 inch (6 mm) wide single fold and second fold 1/2 inch (13 mm) wide, providing locked portion of standing seam, 5 plies in thickness.

G. Fold lower ends of seams at eaves over at 45 degree angle.

3.05 INSTALLATION - BUILT-IN GUTTERS AND DOWNSPOUTS

A. Secure gutter lining to substrate with cleats spaced minimum 12 inches ([____] mm) on center along edges of gutters.

B. Longitudinal joints not acceptable.

C. At roof edges, extend gutter lining under metal roofing 6 inches (152 mm) minimum and terminate in 3/4 inch (19 mm) folded edge secured by cleats; hook lower end of roofing into lock strip to form 3/4 inch (19 mm) wide loose-lock seam.

D. Seal gutters watertight, and seal joint of gutter to drain.

3.06 INSTALLATION - FLASHINGS

A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted.

B. Cleat and seam all joints.

C. Apply plastic cement compound between metal flashings and felt flashings.

D. Fit flashings tight in place, and make corners square, surfaces true and straight in planes, and lines accurate to profiles.

E. Seal metal joints watertight.

3.07 PROTECTION

A. Do not permit traffic over unprotected roof surface.

END OF SECTION

SECTION 076200
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fabricated sheet metal items, including flashings, counterflashings, gutters, and downspouts.

B. Sealants for joints within sheet metal fabrications.

1.02 RELATED REQUIREMENTS

A. Section 042000 - Unit Masonry: Metal flashings embedded in masonry.

B. Section 061000 - Rough Carpentry: Wood nailers for sheet metal work.

1.03 REFERENCE STANDARDS

A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix) 2020.

B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2020.

C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants 2018.

D. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free 2007 (Reapproved 2018).

E. CDA A4050 - Copper in Architecture - Handbook current edition.

F. SMACNA (ASMM) - Architectural Sheet Metal Manual 2012.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene one week before starting work of this section.

1.05 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.

1.06 QUALITY ASSURANCE

A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.

B. Maintain one copy of each document on site.

C. Fabricator and Installer Qualifications: Company specializing in sheet metal work with 5 years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.

B. Prevent contact with materials that could cause discoloration or staining.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Sheet Metal Flashing and Trim Manufacturers:
   1. Petersen Aluminum Corporation: www.pac-clad.com/#sle.
   2. Substitutions: See Section 016000 - Product Requirements.

2.02 SHEET MATERIALS

A. Pre-Finished Galvanized Steel: ASTM A653/A653M, with G90/Z275 zinc coating; minimum 24 gage, (0.0239) inch (0.61 mm) thick base metal, shop pre-coated with PVDF coating.

1. PVDF (Polyvinylidene Fluoride) Coating: Superior Performance Organic Finish, AAMA 2605; multiple coat, thermally cured fluoropolymer finish system.
2. Color (for items concealed from public view): Selected from full range of manufacturers options..
3. Color (for items exposed to public view): Color as selected by the Design Team. Shall match the color of the standing seam metal roof.

2.03 FABRICATION

A. Form sections true to shape, accurate in size, square, and free from distortion or defects.

B. Fabricate cleats of continuous galvanized type sheet metal, interlocking with sheet.

C. Form pieces in longest possible lengths.

D. Hem exposed edges on underside 1/2 inch (13 mm); miter and seam corners.

E. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.

F. Fabricate corners from one piece with minimum 18 inch (450 mm) long legs; seam for rigidity, seal with sealant.

G. Fabricate vertical faces with bottom edge formed outward 1/4 inch (6 mm) and hemmed to form drip.

H. Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing gravel. Return and brake edges.

2.04 GUTTER AND DOWNSPOUT FABRICATION

A. Gutters: Profile as indicated.

B. Downspouts: Rectangular profile.

C. Gutters and Downspouts: Size indicated.

D. Accessories: Profiled to suit gutters and downspouts.
   1. Anchorage Devices: In accordance with SMACNA (ASMM) requirements.
   2. Gutter Supports: Brackets.
   3. Downspout Supports: Brackets.

E. Downspout Extenders: Same material and finish as downspouts.

F. Seal metal joints.

2.05 ACCESSORIES

A. Fasteners: Galvanized steel, with soft neoprene washers.

B. Primer: Zinc chromate type.

C. Concealed Sealants: Non-curing butyl sealant.

D. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.

E. Plastic Cement: ASTM D4586/D4586M, Type I.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.

B. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

A. Install starter and edge strips, and cleats before starting installation.

B. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil (0.4 mm).

3.03 INSTALLATION

A. Comply with drawing details.

B. Insert flashings into reglets to form tight fit; secure in place with lead wedges; pack remaining spaces with lead wool; seal flashings into reglets with sealant.

C. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted..

D. Apply plastic cement compound between metal flashings and felt flashings.

E. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.

F. Secure gutters and downspouts in place with concealed fasteners.

3.04 FIELD QUALITY CONTROL

A. See Section 014000 - Quality Requirements, for field inspection requirements.

B. Inspection will involve surveillance of work during installation to ascertain compliance with specified requirements.

END OF SECTION

SECTION 079200
JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Nonsag gunnable joint sealants.

B. Self-leveling pourable joint sealants.

C. Joint backings and accessories.

1.02 REFERENCE STANDARDS

A. ASTM C794 - Standard Test Method for Adhesion-In-Peel of Elastomeric Joint Sealants 2018.

B. ASTM C920 - Standard Specification for Elastomeric Joint Sealants 2018.

C. ASTM C1087 - Standard Test Method for Determining Compatibility of Liquid-Applied Sealants with Accessories Used in Structural Glazing Systems 2016.

D. ASTM C1193 - Standard Guide for Use of Joint Sealants 2016.

E. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants 2018.

F. ASTM C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants 2018.

G. ASTM C1521 - Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints 2019 (Reapproved 2020).

1.03 SUBMITTALS

A. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.
   1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
   2. List of backing materials approved for use with the specific product.
   3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
   4. Substrates the product should not be used on.
   5. Sample product warranty.

B. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.

C. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect and submit at least two physical samples for verification of color of each required sealant.

D. Preconstruction Laboratory Test Reports: Submit at least four weeks prior to start of installation.

E. Installation Plan: Submit at least four weeks prior to start of installation.

F. Preinstallation Field Adhesion Test Plan: Submit at least two weeks prior to start of installation.

G. Preinstallation Field Adhesion Test Reports: Submit filled out Preinstallation Field Adhesion Test Reports log within 10 days after completion of tests; include bagged test samples and photographic records.

H. Installation Log: Submit filled out log for each length or instance of sealant installed.

1.04 QUALITY ASSURANCE

A. Maintain one copy of each referenced document covering installation requirements on site.

B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of documented experience.

C. Preconstruction Laboratory Testing: Arrange for sealant manufacturer(s) to test each combination of sealant, substrate, backing, and accessories.

1. Adhesion Testing: In accordance with ASTM C794.
2. Compatibility Testing: In accordance with ASTM C1087.
3. Allow sufficient time for testing to avoid delaying the work.
4. Deliver to manufacturer sufficient samples for testing.
5. Report manufacturer's recommended corrective measures, if any, including primers or techniques not indicated in product data submittals.
6. Testing is not required if sealant manufacturer provides data showing previous testing, not older than 24 months, that shows satisfactory adhesion, lack of staining, and compatibility.

D. Installation Plan: Include schedule of sealed joints, including the following.
   1. Joint width indicated in Contract Documents.
   2. Joint depth indicated in Contract Documents; to face of backing material at centerline of joint.
   3. Method to be used to protect adjacent surfaces from sealant droppings and smears, with acknowledgement that some surfaces cannot be cleaned to like-new condition and therefore prevention is imperative.
   4. Installation Log Form: Include the following data fields, with known information filled out.
      a. Date of installation.
      b. Name of installer.
      c. Actual joint width; provide space to indicate maximum and minimum width.
      d. Actual joint depth to face of backing material at centerline of joint.
      e. Air temperature.

E. Preinstallation Field Adhesion Test Plan: Include destructive field adhesion testing of one sample of each combination of sealant type and substrate, except interior acrylic latex sealants, and include the following for each tested sample.
   1. Identification of testing agency.
   2. Preinstallation Field Adhesion Test Log Form: Include the following data fields, with known information filled out.
      a. Test date.
      b. Copy of test method documents.
      c. Age of sealant upon date of testing.
      d. Test results, modeled after the sample form in the test method document.
      e. Indicate use of photographic record of test.

F. Field Adhesion Test Procedures:
   1. Allow sealants to fully cure as recommended by manufacturer before testing.
   2. Have a copy of the test method document available during tests.
   3. Record the type of failure that occurred, other information required by test method, and the information required on the Field Quality Control Log.
   4. When performing destructive tests, also inspect the opened joint for proper installation characteristics recommended by manufacturer, and report any deficiencies.
   5. Deliver the samples removed during destructive tests in separate sealed plastic bags, identified with project, location, test date, and test results, to Owner.
   6. If any combination of sealant type and substrate does not show evidence of minimum adhesion or shows cohesion failure before minimum adhesion, report results to Architect.

G. Destructive Field Adhesion Test: Test for adhesion in accordance with ASTM C1521, using Destructive Tail Procedure.
   1. Sample: At least 18 inch (457 mm) long.
   2. Minimum Elongation Without Adhesive Failure: Consider the tail at rest, not under any elongation stress; multiply the stated movement capability of the sealant in percent by two; then multiply 1 inch (25 mm) by that percentage; if adhesion failure occurs before the "1 inch mark" is that distance from the substrate, the test has failed.
   3. If either adhesive or cohesive failure occurs prior to minimum elongation, take necessary measures to correct conditions and re-test; record each modification to products or installation procedures.

1.05 WARRANTY

A. Correct defective work within a five year period after Date of Substantial Completion.

B. Warranty: Include coverage for installed sealants and accessories that fail to achieve watertight seal , exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Non-Sag Sealants: Permits application in joints on vertical surfaces without sagging or slumping.
   1. Dow Chemical Company: consumer.dow.com/en-us/industry/ind-building-construction.html/#sle.
   2. Pecora Corporation: www.pecora.com/#sle.
   3. Sika Corporation: www.usa-sika.com/#sle.
   4. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.

B. Self-Leveling Sealants: Pourable or self-leveling sealant that has sufficient flow to form a smooth, level surface when applied in a horizontal joint.
   1. Bostik Inc: www.bostik-us.com/#sle.
   2. Pecora Corporation: www.pecora.com/#sle.
   3. Sika Corporation: www.usa-sika.com/#sle.
   4. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.

2.02 JOINT SEALANT APPLICATIONS

A. Scope:
   1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items.
      a. Wall expansion and control joints.
      b. Joints between door, window, and other frames and adjacent construction.
      c. Joints between different exposed materials.
      d. Openings below ledge angles in masonry.
      e. Other joints indicated below.
   2. Interior Joints: Do not seal interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the following items.
      a. Joints between door, window, and other frames and adjacent construction.
      b. Other joints indicated below.
   3. Do not seal the following types of joints.
      a. Intentional weepholes in masonry.
      b. Joints indicated to be treated with manufactured expansion joint cover or some other type of sealing device.
      c. Joints where sealant is specified to be provided by manufacturer of product to be sealed.
      d. Joints where installation of sealant is specified in another section.
      e. Joints between suspended panel ceilings/grid and walls.

B. Exterior Joints: Use non-sag non-staining silicone sealant, unless otherwise indicated.

C. Interior Joints: Use non-sag polyurethane sealant, unless otherwise indicated.
   1. Use mildew resistant silicone sealant adjacent to plumbing fixtures. Use type in compliance with adjacent materials.

2.03 JOINT SEALANTS - GENERAL

2.04 NONSAG JOINT SEALANTS

A. Type JS-1 - Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
   1. Movement Capability: Plus 100 percent, minus 50 percent, minimum.

2. Non-Staining To Porous Stone: Non-staining to light-colored natural stone when tested in accordance with ASTM C1248.
3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
4. Color: Match adjacent finished surfaces.
5. Cure Type: Single-component, neutral moisture curing.
6. Service Temperature Range: Minus 65 to 180 degrees F (Minus 54 to 82 degrees C).
7. Manufacturers:
   a. Dow Chemical Company; DOWSIL 795: Silicone Building Sealant: consumer.dow.com/en-us/industry/ind-building-construction.html/#sle.

B. Type JS-2 - Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component, mildew resistant; not expected to withstand continuous water immersion or traffic.
1. Color: Selected from Manufacturers full range.
2. Manufacturers:
   a. Pecora Corporation; 898: www.pecora.com/#sle.
   b. Sika Corporation; Sikasil GP: www.usa-sika.com/#sle.
   c. Substitutions: See Section 016000 - Product Requirements.

C. Type JS-3 - Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 25 percent, minimum.
2. Color: Match adjacent finished surfaces.
3. Service Temperature Range: Minus 40 to 180 degrees F (Minus 40 to 82 degrees C).
4. Manufacturers:
   a. Pecora Corporation; Dynatred: www.pecora.com/#sle.
   b. Sika Corporation; Sikaflex-2c NS: www.usa-sika.com/#sle.
   c. Tremco Commercial Sealants & Waterproofing; Vulkem 116: www.tremcosealants.com/#sle.
   d. Substitutions: See Section 016000 - Product Requirements.

2.05 SELF-LEVELING SEALANTS

A. Type JS-4 - Self-Leveling Polyurethane Sealant: ASTM C920, Grade P, Uses M and A; single or multi-component; explicitly approved by manufacturer for traffic exposure; not expected to withstand continuous water immersion .
1. Movement Capability: Plus and minus 25 percent, minimum.
2. Color: To be selected by Architect from manufacturer's standard range.
3. Service Temperature Range: Minus 40 to 180 degrees F (Minus 40 to 82 degrees C).
4. Manufacturers:
   a. Pecora Corporation Urexpan NR-201: www.pecora.com/#sle.
   b. Sika Corporation; Sikaflex-1c SL: www.usa-sika.com/#sle.
   c. Tremco; Vulkem 45.

2.06 ACCESSORIES

A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
1. Type for Joints Not Subject to Pedestrian or Vehicular Traffic: ASTM C1330; Type O - Open Cell Polyurethane.
2. Type for Joints Subject to Pedestrian or Vehicular Traffic: ASTM C1330; Type B - Bi-Cellular Polyethylene.
3. Open Cell: 40 to 50 percent larger in diameter than joint width.
4. Closed Cell and Bi-Cellular: 25 to 33 percent larger in diameter than joint width.

B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.

C. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.

D. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.

E. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that joints are ready to receive work.

B. Verify that backing materials are compatible with sealants.

C. Verify that backer rods are of the correct size.

D. Preinstallation Adhesion Testing: Install a sample for each test location indicated in the test plan.
   1. Test each sample as specified in PART 1 under QUALITY ASSURANCE article.
   2. Notify Architect of date and time that tests will be performed, at least 7 days in advance.
   3. Record each test on Preinstallation Adhesion Test Log as indicated.
   4. If any sample fails, review products and installation procedures, consult manufacturer, or take whatever other measures are necessary to ensure adhesion; re-test in a different location; if unable to obtain satisfactory adhesion, report to Architect.
   5. After completion of tests, remove remaining sample material and prepare joint for new sealant installation.

3.02 PREPARATION

A. Remove loose materials and foreign matter that could impair adhesion of sealant.

B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.

C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.

D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

E. Concrete Floor Joints That Will Be Exposed in Completed Work: Test joint filler in inconspicuous area to verify that it does not stain or discolor slab.

3.03 INSTALLATION

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Perform installation in accordance with ASTM C1193.

C. Install bond breaker backing tape where backer rod cannot be used.

D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.

E. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

F. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

3.04 FIELD QUALITY CONTROL

A. Perform field quality control inspection/testing as specified in PART 1 under QUALITY ASSURANCE article.

B. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

END OF SECTION

SECTION 081113
HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Non-fire-rated hollow metal doors and frames.

B. Thermally insulated hollow metal doors with frames.

1.02 RELATED REQUIREMENTS

A. Section 087100 - Door Hardware.

B. Section 099113 - Exterior Painting: Field painting.

C. Section 099123 - Interior Painting: Field painting.

1.03 REFERENCE STANDARDS

A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design 2010.

B. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors 2018.

C. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100) 2017.

D. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames 2020.

E. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2020.

F. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable 2021a.

G. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength 2018a.

H. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2021a.

I. BHMA A156.115 - Hardware Preparation In Steel Doors And Steel Frames 2016.

J. ICC A117.1 - Accessible and Usable Buildings and Facilities 2017.

K. NAAMM HMMA 830 - Hardware Selection for Hollow Metal Doors and Frames 2002.

L. NAAMM HMMA 831 - Hardware Locations for Hollow Metal Doors and Frames 2011.

M. NAAMM HMMA 840 - Guide Specifications For Receipt, Storage and Installation of Hollow Metal Doors and Frames 2007.

1.04 SUBMITTALS

A. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.
   1. Shop drawings shall designate shop preparation of all hardware. Construction Manager shall coordinate between door/frame supplier and hardware supplier prior to submission of shop drawings.

B. Installation Instructions: Manufacturer's published instructions, including any special installation instructions relating to this project.

C. Manufacturer's Certificate: Certification that products meet or exceed specified requirements.

D. Manufacturer's Qualification Statement.

E. Installer's Qualification Statement.

1.05 QUALITY ASSURANCE

A. Maintain at project site copies of reference standards relating to installation of products specified.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Comply with NAAMM HMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.

B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion and adverse effects on factory applied painted finish.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Hollow Metal Doors and Frames:
   1. Ceco Door, an Assa Abloy Group company: www.assaabloydss.com/#sle.
   2. Curries, an Assa Abloy Group company: www.assaabloydss.com/#sle.
   3. Steelcraft, an Allegion brand: www.allegion.com/#sle.

2.02 PERFORMANCE REQUIREMENTS

A. Requirements for Hollow Metal Doors and Frames:
   1. Steel Sheet: Comply with one or more of the following requirements; galvannealed steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.
   2. Accessibility: Comply with ICC A117.1 and ADA Standards.
   3. Exterior Door Top Closures: Flush end closure channel, with top and door faces aligned.
   4. Door Edge Profile: Manufacturers standard for application indicated.
   5. Typical Door Face Sheets: Flush.
   6. Hardware Preparations, Selections and Locations: Comply with NAAMM HMMA 830 and NAAMM HMMA 831 or BHMA A156.115 and ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
      a. All hollow metal doors and frames shall be shop prepped for hardware.
   7. Zinc Coating for Typical Interior and/or Exterior Locations: Provide metal components zinc-coated (galvanized) and/or zinc-iron alloy-coated (galvannealed) by the hot-dip process in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness, unless noted otherwise for specific hollow metal doors and frames.

B. All Metal Door Frames shall be provided with a wrought box, strike cover and hinge reinforcement cover.

C. All Metal Frames shall have hinge reinforcement fabricaed from plate stock, 1/4"x9" C1018 steel 160 scale Brinnel hardness. Reinforcement is to be securely attached to frame with minimum of four (4) contacts each side of the opening.Reinforcing for holders and closers shall be bow type or double channel of not less than ten gauge steel for three bolt attachment. Reinforcing for field attachment of corner brackets is to be not less than eight gauge steel.

D. All Door frames shall be anchored to the wall with a minimum of three anchors.

E. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

2.03 HOLLOW METAL DOORS

A. Door Finish: Factory primed and field finished.

B. Exterior Doors: Thermally insulated.
   1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
      a. Level 3 - Extra Heavy-duty.

b. Physical Performance Level A, 1,000,000 cycles; in accordance with ANSI/SDI A250.4.
c. Model 1 - Full Flush.
d. Door Face Metal Thickness: 16 gage, 0.053 inch (1.3 mm), minimum.
e. Zinc Coating: A60/ZF180 galvannealed coating; ASTM A653/A653M.

2. Door Core Material: Polyisocyanurate, 2 lbs/cu ft minimum density.
   a. Foam Plastic Insulation: Manufacturer's standard board insulation with maximum flame spread index (FSI) of 75, and maximum smoke developed index (SDI) of 450 in accordance with ASTM E84, and completely enclosed within interior of door.
3. Door Thermal Resistance: R-Value of 6.0 minimum, for installed thickness of polystyrene.
4. Door Thickness: 1-3/4 inch (44.5 mm), nominal.
5. Weatherstripping: Refer to Section 087100.

C. Interior Doors, Non-Fire-Rated:
   1. Door Thickness: 1-3/4 inch (44.5 mm), nominal.

2.04 HOLLOW METAL FRAMES

A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.

B. Frame Finish: Factory primed and field finished.

C. Exterior Door Frames: Full profile/continuously welded type.
   1. Weatherstripping: Separate, see Section 087100.

D. Interior Door Frames, Non-Fire Rated: Full profile/continuously welded type.
   1. Frame Metal Thickness: 18 gage, 0.042 inch (1.0 mm), minimum.

2.05 FINISHES

A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

2.06 ACCESSORIES

A. Louvers: Roll formed steel with overlapping frame; finish same as door components ; factory-installed.
   1. Style: Standard straight slat blade.
   2. Fasteners: Concealed fasteners.
   3. Size: 18x18 minimum - coordinate with engineer of record prior to preparation of shop drawings.

B. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.

C. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that opening sizes and tolerances are acceptable.

C. Verify that finished walls are in plane to ensure proper door alignment.

3.02 PREPARATION

A. Coat inside of frames to be installed in masonry or to be grouted, with bituminous coating, prior to installation.

B. All hollow metal doors and frames shall be shop for hardware before delivery to the jobsite.

3.03 INSTALLATION

A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.

B. Coordinate frame anchor placement with wall construction.

C. Install door hardware as specified in Section 087100.

D. Coordinate installation of electrical connections to electrical hardware items.

E. Touch up damaged factory finishes.

3.04 TOLERANCES

A. Maximum Diagonal Distortion: 1/16 inch (1.6 mm) measured with straight edge, corner to corner.

3.05 ADJUSTING

A. Adjust for smooth and balanced door movement.

3.06 SCHEDULE

A. Refer to Door and Frame Schedule on the drawings.

END OF SECTION

SECTION 083100
ACCESS DOORS AND PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Wall and ceiling mounted access units.

1.02 RELATED REQUIREMENTS

A. Section 042000: Openings in masonry.

B. Section 099123 - Interior Painting: Field paint finish.

1.03 SUBMITTALS

A. List of required access doors: Based on mechanical, plumbing, and electrical drawings and specifications, prepare a comprehensive list of all required access doors, with sizes and locations.

B. Product Data: Provide sizes, types, finishes, hardware, scheduled locations, and details of adjoining work.

C. Shop Drawings: Indicate exact position of each access door and/or panel unit.

PART 2 PRODUCTS

2.01 ACCESS DOORS AND PANELS ASSEMBLIES

A. Wall-Mounted Units in Wet Areas (including toilet rooms):
   1. Panel Material: Aluminum with gasketing.
   2. Size: 12 by 12 inches (305 by 305 mm), and other sizes as required.
   3. Door/Panel: Hinged, standard duty, with tool-operated spring or cam lock and no handle.
   4. Masonry Mounting Criteria: Provide surface-mounted frame with door surface flush with frame surface.

B. Ceiling-Mounted Units :
   1. Size - Other Ceilings: 12 by 12 inches (305 by 305 mm), or as required.
   2. Door/Panel: Hinged, standard duty, with tool-operated spring or cam lock and no handle.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that rough openings are correctly sized and located.

B. Begin installation only after substrates have been properly prepared, and if the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to proceeding with this work.

B. Prepare surfaces using methods recommended by manufacturer for applicable substrates in accordance with project conditions.

3.03 INSTALLATION

A. Install units in accordance with manufacturer's instructions.

B. Install frames plumb and level in openings, and secure units rigidly in place.

C. Position units to provide convenient access to concealed equipment when necessary.

END OF SECTION

SECTION 087100
DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Other doors to the extent indicated.

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.

C. Related Sections:

1. Division 08 Section “Hollow Metal Doors and Frames”.

D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards:

1. ANSI/BHMA Certified Product Standards - A156 Series
2. UL10C – Positive Pressure Fire Tests of Door Assemblies

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door

Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."

2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.

3. Content: Include the following information:

    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

D. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals.

1.4 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

D. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

E. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.

F. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

G. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

H. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.6 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

D. Special Warranty Periods:

1. Ten years for mortise locks and latches.
2. Five years for exit hardware.

1.8 MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:

1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.

C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity:

a. Two Hinges: For doors with heights up to 60 inches.
b. Three Hinges: For doors with heights 61 to 90 inches.
c. Four Hinges: For doors with heights 91 to 120 inches.
d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.

b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

4. Hinge Options: Comply with the following:

a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.

5. Manufacturers:

a. Hager Companies (HA).
b. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK).

B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 certified continuous geared hinge. with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

1. Manufacturers:

a. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).

2.3 DOOR OPERATING TRIM

A. Door Push Plates and Pulls: ANSI/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
2. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.

3. Manufacturers:

a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).

2.4 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.

B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.

1. Manufacturers:

a. Stanley Best (BE). Peaks

b. No Substitution.

C. Cylinders: Original manufacturer cylinders complying with the following:

1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
5. Keyway: Match Facility Restricted Keyway.

D. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:

1. Interchangeable Cores: Core insert, removable by use of a special key; usable with other manufacturers' cylinders.

E. Keying System: Each type of lock and cylinders to be factory keyed.

1. Conduct specified "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. Existing System: Key locks to Owner's existing system.

F. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Final key quantity to be determined between the owner and Best.

G. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

H. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.

1. Manufacturers:

a. Lund Equipment (LU).
b. Telkee (TK).

2.5 MECHANICAL LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 certified. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.

1. Manufacturers:

    a. Corbin Russwin Hardware (RU) – ML2000 Series.
    b. No Substitution.

2.6 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.7 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.

2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer’s catalog and template book for specific requirements.

3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.

4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.

5. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

6. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.

7. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2” wide stiles.

8. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.

9. Rail Sizing: Provide exit device rails factory sized for proper door width application.

10. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.

1. Manufacturers:

    a. Von Duprin (VD) - 35A/98 XP Series.
    b. No Substitution.

2.8 DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.

2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.

3. Cycle Testing: Provide closers which have surpassed 15 million cycles in a test witnessed and verified by UL.

4. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of

use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.

5. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.

6. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.

7. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. Door Closers, Surface Mounted (Large Body Cast Iron): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.

1. Manufacturers:

a. LCN Closers (LC) - 4040XP Series. Exterior Openings
b. No Substitution.

C. Door Closers, Surface Mounted (Commercial Duty): ANSI/BHMA 156.4, Grade 1 certified surface mounted, institutional grade door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck, closing sweep, and latch speed control valves. Provide non-handed units standard.

1. Manufacturers:

a. Sargent Manufacturing (SA) - 1461 Series. Interior Openings

2.9 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.

2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.

3. Where plates are applied to fire rated doors with the top of the plate more than 16” above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer’s catalog and template book for specific requirements for size and applications.

4. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:

    a. Stainless Steel: 300 grade, 050-inch thick.

5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.

6. Manufacturers:

    a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).

2.10 DOOR STOPS AND HOLDERS

A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.

B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Manufacturers:

    a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).

C. Overhead Door Stops and Holders: ANSI/BHMA A156.6, Grade 1 certified overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Manufacturers:

    a. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).

2.11 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

F. Manufacturers:

1. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).

2.12 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.13 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

B. The supplier is responsible for handing and sizing all products and providing the correct option for the appropriate door type and material where more than one is presented in the hardware sets. Quantities listed are for each pair of doors, or for each single door.

C. Manufacturer’s Abbreviations:

1. MK - McKinney
2. PE - Pemko
3. VD - Von Duprin
4. RU - Corbin Russwin
5. BE - dormakaba Best
6. RO - Rockwood
7. RF - Rixson
8. LC - LCN Closers

9. OT - OTHER

Hardware Sets

Set: 1.0

Doors: 101

1 Continuous Hinge	CFM83HD1		PE
1 Storeroom Lock	ML2057 NSN CLS7	626	RU
1 7 Pin Small Format Core	Best Peaks		BE
1 Door Closer	4040XP SCUSH TBSRT	AL	LC
1 Threshold	2009APK		PE
1 Gasketing	312CR		PE
1 Rain Guard	346C		PE
1 Sweep	315CN		PE

Set: 2.0

Doors: 100, 102

3 Hinge (heavy weight)	T4A3786 4-1/2" x 4-1/2"	US26D	MK
1 Cylindrical Deadbolt	CR DL3200	US26D	CR
1 Push Plate	70C-RKW	US32D	RO
1 Pull Plate	107x70C	US32D	RO
1 Surface Closer w/ Stop	1461 SCUSH TBSRT	AL	LC
1 Kick Plate	K1050 10" x Width Req'd CSK	US32D	RO
3 Silencer	608-RKW		RO

END OF SECTION 087100

SECTION 088300
MIRRORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Polished stainless steel mirrors.

1.02 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data on Mirror Types: Submit structural, physical and environmental characteristics, size limitations, special handling and installation requirements.

C. Samples: Submit two samples, illustrating mirrors design, edging, coloration, and [_____].

D. Manufacturer's Certificate: Certify that mirrors, meets or exceeds specified requirements.

E. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 016000 - Product Requirements, for additional provisions.

1.03 QUALITY ASSURANCE

A. Fabricate, store, transport, receive, install, and clean mirrors in accordance with manufacturer's recommendations.

1.04 FIELD CONDITIONS

A. Do not install polished stainless steel mirrors when ambient temperature is less than 50 degrees F (10 degrees C).

B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.05 WARRANTY

A. See Section 017800 - Closeout Submittals, for additional warranty requirements.

B. Provide five year manufacturer warranty for reflective coating on mirrors and replacement of same.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Polished Stainless Steel Mirrors:
   1. Vandal Stop Products (530) 894-7867.
   2. Size: 24x48 - refer drawings for additional information.

2.02 MATERIALS

A. Polished stainless steel Mirror:
   1. #8 non directional mirror polished stainless steel.
   2. Type 304 Stainless Steel
   3. 16 ga material (.0595 inches)

2.03 ACCESSORIES

A. Glazing Clips: Provide in conjunction with mirror adhesive.
   1. Stainless J Trim:
      a. Manufacturers: Stainless J Trim

B. Stainless Steel Mirror Adhesive: Manufacturers recommended highest performing mirror adhesive - provided in conjunction with mirror glazing clips/trim.
   1. Install in strict accordance with manufacturers written instructions.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces of mirror frames or recesses are clean, free of obstructions, and ready for installation of polished stainless steel mirrors.

3.02 PREPARATION

A. Clean contact surfaces with solvent and wipe dry.

B. Seal porous polished stainless steel mirrors frames or recesses with substrate compatible primer or sealer. Prime surfaces scheduled to receive sealant.

C. Prepare installation in accordance with ASTM C1193 for solvent release sealants, and install sealant in accordance with manufacturer's instructions.

3.03 INSTALLATION

A. Install polished stainless steel mirrors in accordance with manufacturer's recommendations.

B. Set polished stainless steel mirrors plumb and level, and free of optical distortion.

C. Set polished stainless steel mirrors with edge clearance free of surrounding construction including countertops or backsplashes.

D. Installation in Frames:

1. Install in strict accordance with manufacturers written recommendations, including both mechanical fasteners and adhesive installation systems.

3.04 CLEANING

A. Remove labels after work is complete.

B. Clean polished stainless steel mirrors and adjacent surfaces.

END OF SECTION

SECTION 092116
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Metal channel ceiling framing.

B. Gypsum wallboard.

C. Joint treatment and accessories.

D. Textured finish system.

1.02 REFERENCE STANDARDS

A. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board 2017.

B. ASTM C645 - Standard Specification for Nonstructural Steel Framing Members 2018.

C. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing 2017.

D. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products 2020.

E. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board 2020.

F. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs 2020.

G. ASTM C1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base 2019.

H. ASTM C1396/C1396M - Standard Specification for Gypsum Board 2017.

I. GA-216 - Application and Finishing of Gypsum Panel Products 2016, with Errata.

1.03 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing gypsum board installation and finishing, with minimum five (5) years of experience.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

A. Provide completed assemblies complying with ASTM C840 and GA-216.

2.02 METAL FRAMING MATERIALS

A. Non-Loadbearing Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/120 at 5 psf (L/120 at 240 Pa).
   1. Studs: "C" shaped with flat or formed webs with knurled faces.
   2. Runners: U shaped, sized to match studs.
   3. Ceiling Channels: C-shaped.

2.03 BOARD MATERIALS

A. Manufacturers - Gypsum-Based Board:
   1. CertainTeed Corporation: www.certainteed.com/#sle.
   2. Georgia-Pacific Gypsum: www.gpgypsum.com/#sle.
   3. USG Corporation: www.usg.com/#sle.

B. Gypsum Wallboard: Glass Mat-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
   1. Application: Use for ceilings, unless otherwise indicated.
   2. Thickness:
      a. Ceilings: 1/2 inch (13 mm).

3. Glass Mat Faced Products:
    a. Georgia-Pacific Gypsum; DensArmor Plus
        1) Ceilings in exterior locations and toilet areas.

2.04 GYPSUM WALLBOARD ACCESSORIES

A. Acoustic Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced. Thickness: 3 inch (77 mm).

B. Acoustic Sealant: Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant.

C. Beads, Joint Accessories, and Other Trim: ASTM C1047, rigid plastic, galvanized steel, or rolled zinc, unless noted otherwise.
1. Edge Trim:
    a. Products: USG No. 200A Edge Trim.
2. Expansion Joints:
    a. Type: V-shaped metal with factory-installed protective tape.
    b. Products:
        1) Phillips Manufacturing Co; 093 Expansion Control Joint: www.phillipsmfg.com/#sle.

D. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.
1. Paper Tape: 2 inch (50 mm) wide, creased paper tape for joints and corners, except as otherwise indicated.
2. Joint Compound: Drying type, vinyl-based, ready-mixed.
    a. Products:
        1) CertainTeed Corporation; Extreme All-Purpose Joint Compound: www.certainteed.com/#sle.
        2) Substitutions: See Section 016000 - Product Requirements.

E. Finishing Compound: Surface coat and primer, takes the place of skim coating.
1. Products:
    a. CertainTeed Corporation; Quick Prep Plus Interior Prep Coat: www.certainteed.com/#sle.

F. High Build Drywall Surfacer: Vinyl acrylic latex-based coating for spray application, designed to take the place of skim coating and separate paint primer in achieving Level 5 finish.

G. Textured Finish Materials: Latex-based compound; plain.

H. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inch (0.84 mm) in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion resistant.

I. Screws for Fastening of Gypsum Panel Products to Steel Members from 0.033 to 0.112 inch (0.84 to 2.84 mm) in Thickness: ASTM C954; steel drill screws, corrosion resistant.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 FRAMING INSTALLATION

A. Metal Framing: Install in accordance with ASTM C754 and manufacturer's instructions.

B. Suspended Ceilings: Space framing and furring members as indicated.
1. Level ceiling system to a tolerance of 1/1200.
2. Laterally brace entire suspension system.
3. Install bracing as required at exterior locations to resist wind uplift.

C. Basis of Design System: 6' DGS Cross Tee Drywall Grid System.

D. Studs: Space studs at 16 inches on center (at 406 mm on center).

1. Extend partition framing to structure where indicated and to ceiling in other locations.
2. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.

3.03 ACOUSTIC ACCESSORIES INSTALLATION

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

B. Acoustic Sealant: Install in accordance with manufacturer's instructions.
   1. Place one bead continuously on substrate before installation of perimeter framing members.
   2. Place continuous bead at perimeter of each layer of gypsum board.
   3. Seal around all penetrations by conduit, pipe, ducts, and rough-in boxes, except where firestopping is provided.

3.04 BOARD INSTALLATION

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

B. Single-Layer Non-Rated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
   1. Exception: Tapered edges to receive joint treatment at right angles to framing.

C. Exposed Gypsum Board in Interior Wet Areas: Seal joints, cut edges, and holes with water-resistant sealant.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
   1. Not more than 30 feet (10 meters) apart on walls and ceilings over 50 feet (16 meters) long.
   2. At exterior soffits, not more than 30 feet (10 meters) apart in both directions.

B. Corner Beads: Install at external corners, using longest practical lengths.

C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials.

3.06 JOINT TREATMENT

A. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
   1. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
   2. Level 1: Wall areas above finished ceilings, whether or not accessible in the completed construction.

B. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
   1. Feather coats of joint compound so that camber is maximum 1/32 inch (0.8 mm).
   2. Taping, filling, and sanding is not required at surfaces behind adhesive applied ceramic tile and fixed cabinetry.

C. Where Level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.

3.07 TEXTURE FINISH

A. Apply finish texture coating by means of spraying apparatus in accordance with manufacturer's instructions and to match approved sample.

3.08 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet (3 mm in 3 m) in any direction.

END OF SECTION

SECTION 096700
FLUID-APPLIED FLOORING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fluid-applied flooring and base.

1.02 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns and colors available.

C. Samples: Submit two samples, 12"x12" in size illustrating color and pattern for each floor material for each color specified.
   1. Sample shall show overall system thickness and slip-resistant system for both flooring and cove base.

1.03 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years documented experience.

B. Applicator Qualifications: Company specializing in performing the work of this section.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Store resin materials in a dry, secure area.

PART 2 PRODUCTS

2.01 FLUID-APPLIED FLOORING SYSTEMS

A. Fluid-Applied Flooring: Epoxy, two component, thermosetting, colored with mineral filler, with aggregate broadcast on base coat.
   1. Base Coat: Thickness as specified by manufacturer; color as selected by the Owner and Architect.
   2. Aggregate: Small quartz chips, multiple colors as selected. Aggregate shall be a combination of 1/8" and 1/16" chips in percentages as selected by Owner and Architect.
   3. Top Coat: Epoxy, two component, thermosetting; 1/16" thick; clear. Total system shall be 1/8" thick.
   4. Color: Selected by Owner and Architect.
   5. Basis of Design Product: FloroChip Epoxy Flake Flooring as manufactured by Florock, system documented as follows:..
      a. Floropoxy Primer
      b. Floropoxy Pigmented epoxy system
      c. 1st Broadcast Florochips
      d. Floropoxy Clear epoxy system
      e. High Performance Topcoat Clear
      f. Additional Slip Resistance
      g. Provide integral 4" base with same material as floor system.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive flooring.

B. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of materials to sub-floor surfaces.

C. Verify that concrete sub-floor surfaces are ready for flooring installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by flooring materials manufacturer.

D. Verify that required floor-mounted utilities are in correct location.

3.02 INSTALLATION - FLOORING

A. Apply in accordance with manufacturer's instructions.

B. Apply each coat to minimum thickness required by manufacturer.

C. Finish to smooth level surface with Owner provided slip resistance.

3.03 PROTECTION

A. Barricade area to protect flooring until fully cured.

END OF SECTION

SECTION 099113
EXTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
   1. Exposed surfaces of steel lintels and ledge angles.

D. Do Not Paint or Finish the Following Items:
   1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
   2. Items indicated to receive other finishes.
   3. Items indicated to remain unfinished.
   4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
   5. Floors, unless specifically indicated.
   6. Brick, glass unit masonry, architectural concrete, cast stone, integrally colored plaster and stucco.
   7. Glass.
   8. Concealed pipes, ducts, and conduits.

1.02 RELATED REQUIREMENTS

A. Section 055000 - Metal Fabrications: Shop-primed items.

B. Section 099123 - Interior Painting.

1.03 REFERENCE STANDARDS

A. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual Current Edition.

B. SSPC-SP 1 - Solvent Cleaning 2015, with Editorial Revision (2016).

C. SSPC-SP 2 - Hand Tool Cleaning 2018.

D. SSPC-SP 6 - Commercial Blast Cleaning 2007.

1.04 SUBMITTALS

A. Product Data: Provide complete list of products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
   2. MPI product number (e.g. MPI #47).
   3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
   4. Manufacturer's installation instructions.
   5. If proposal of substitutions is allowed under submittal procedures, explanation of substitutions proposed.

B. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.
   1. Where sheen is specified, submit samples in only that sheen.
   2. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry, have been approved.

C. Certification: By manufacturer that paints and finishes comply with VOC limits specified.

D. Manufacturer's Instructions: Indicate special surface preparation procedures.

E. Maintenance Data: Submit data including finish schedule showing where each product/color/finish was used, product technical data sheets, material safety data sheets (MSDS), care and cleaning instructions, touch-up procedures, repair of painted and finished surfaces, and color samples of each color and finish used.

F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 016000 - Product Requirements, for additional provisions.
   2. Extra Paint and Finish Materials: 5 gallons (20 L) of each color; from the same product run, store where directed.
   3. Label each container with color in addition to the manufacturer's label.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years documented experience.

B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum 5 years experience and approved by manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Do not apply exterior paint and finishes during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.

D. Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

B. Paints:
   1. Tnemec Company: www.tnemec.com.

C. Primer Sealers: Same manufacturer as top coats.

D. Substitutions: See Section 016000 - Product Requirements.

2.02 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready mixed, unless required to be a field-catalyzed paint.
   1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
   2. Supply each paint material in quantity required to complete entire project's work from a single production run.
   3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

2.03 PAINT SYSTEMS - EXTERIOR

A. Paint E-OP - Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including primed metal.
   1. Two top coats and one coat primer.
      a. Top coats: HDP Acrylic Polymer. Basis of Design: Series 1029 Enduratone as manufactured by Tnemec.
      b. Primer: Manufacturers recommended high performance primer for specific application and top coat material.

2.04 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of paints and finishes until substrates have been properly prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.

D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

E. Test shop-applied primer for compatibility with subsequent cover materials.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

F. Galvanized Surfaces:
   1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
   2. Prepare surface according to SSPC-SP 2.

G. Ferrous Metal:
   1. Solvent clean according to SSPC-SP 1.
   2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.
   3. Remove rust, loose mill scale, and other foreign substances using using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.

H. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION

A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

B. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".

C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

D. Apply each coat to uniform appearance.

E. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply additional coats until complete hide is achieved.

F. Sand metal surfaces lightly between coats to achieve required finish.

G. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

H. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

I. All metal doors and door frames shall be spray painted. Brushed on paint shall not be allowed. Repairs or corrections to paint on Metal Doors and Door Frames shall be spray painted.

J. All Electrical disconnects supplying fire alarm power shall be painted red (final color to be selected by the Architect).

3.04 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

3.06 COLOR SCHEDULE

A. Provide Custom Color:

END OF SECTION

SECTION 099123
INTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
   1. Mechanical and Electrical:
      a. In finished areas, paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated.

D. Do Not Paint or Finish the Following Items:
   1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
   2. Items indicated to receive other finishes.
   3. Items indicated to remain unfinished.
   4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
   5. Floors, unless specifically indicated.
   6. Glass.
   7. Concealed pipes, ducts, and conduits.
   8. Do not paint aluminum, brass, bronze, stainless steel and chrome plated steel.
   9. Do not paint code required labels, UL and FM and equipment identification, performance rating, name and nomenclature plates.

1.02 REFERENCE STANDARDS

A. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual Current Edition.

1.03 SUBMITTALS

A. Product Data: Provide complete list of products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
   2. MPI product number (e.g. MPI #47).
   3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
   4. Manufacturer's installation instructions.
   5. If proposal of substitutions is allowed under submittal procedures, explanation of substitutions proposed.

B. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches (216 by 279 mm) in size, illustrating range of colors available for each finishing product specified.
   1. Where sheen is specified, submit samples in only that sheen.
   2. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry, have been approved.

C. Certification: By manufacturer that paints and finishes comply with VOC limits specified.

D. Manufacturer's Instructions: Indicate special surface preparation procedures.

E. Maintenance Data: Submit data including finish schedule showing where each product/color/finish was used, product technical data sheets, material safety data sheets (MSDS), care and cleaning instructions, touch-up procedures, repair of painted and finished surfaces, and color samples of each color and finish used.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years documented experience.

B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum 5 years experience and approved by manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

1.06 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Do not apply materials when relative humidity exceeds 85 percent; at temperatures less than 5 degrees F (3 degrees C) above the dew point; or to damp or wet surfaces.

D. Minimum Application Temperatures for Paints: 50 degrees F (10 degrees C) for interiors unless required otherwise by manufacturer's instructions.

E. Provide lighting level of 80 ft candles (860 lx) measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

B. Paints:
   1. PPG Paints: www.ppgpaints.com/#sle.
   2. Benjamin Moore: www.benjaminmoore.com

C. Substitutions: See Section 016000 - Product Requirements.

2.02 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready mixed, unless intended to be a field-catalyzed paint.
   1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
   2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
   3. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
   4. Supply each paint material in quantity required to complete entire project's work from a single production run.
   5. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

B. Colors: full range of colors including custom color.
   1. Allow for minimum of five colors for each system, unless otherwise indicated, without additional cost to Owner.
   2. Extend colors to surface edges; colors may change at any edge as directed by Architect.

3. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling they are mounted on/under.

2.03 PAINT SYSTEMS - INTERIOR

A. Paint I-OP - Interior Ceiling Surfaces to be Painted, Unless Otherwise Indicated: Including high performance gypsum board.
   1. Two top coats and one coat manufacturer recommended primer.
   2. Top Coat(s): High Performance Architectural Interior Latex; MPI #138, 139, 140, or 141.
      a. Products:
         1) Benjamin Moore Ultra Spec 500 Interior Paint
         2) Substitutions: Section 016000 - Product Requirements.
   3. Primer: As recommended by top coat manufacturer for specific substrate.

B. Paint I-OP-MD-DT - Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants, including metals:
   1. Medium duty applications include doors and door frames.
   2. Two top coats and one coat manufacturer recommended primer.
   3. Top Coat(s): High Performance Architectural Interior Latex; MPI #139, 140, or 141.
      a. Products:
         1) PPG Paints Pitt-Glaze WB1 Pre-Catalyzed Water-Borne Acrylic Epoxy, 16-510 Series, Semi-Gloss.
   4. Primer: As recommended by top coat manufacturer for specific substrate.

C. Paint I-OP-MD-WC - Medium Duty Vertical and Overhead: Including concrete masonry units.
   1. Two top coats and one coat manufacturer recommeded primer.
   2. Top Coat(s): High Performance Architectural Interior Latex; MPI #138, 139, 140, or 141.
      a. Products:
         1) PPG Paints Pitt-Glaze WB1 Pre-Catalyzed Water-Borne Acrylic Epoxy, 16-310 Series, Eggshell.
   3. Primer: As recommended by top coat manufacturer for specific substrate.

2.04 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of paints and finishes until substrates have been properly prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.

D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

E. Test shop-applied primer for compatibility with subsequent cover materials.

F. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
   1. Gypsum Wallboard: 12 percent.
   2. Masonry, Concrete, and Concrete Masonry Units: 12 percent.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Masonry:

F. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.

G. Wood Doors to be Field-Finished: Seal wood door top and bottom edge surfaces with clear sealer.

H. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.
   1. Metal Doors and Frames shall be spray painted. Brushed on paint shall not be allowed. Repairs or corrections to paint on Metal Doors and Door Frames shall be spray painted.

3.03 APPLICATION

A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

B. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".

C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

D. Apply each coat to uniform appearance in thicknesses specified by manufacturer.

E. Sand wood and metal surfaces lightly between coats to achieve required finish.

F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

G. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 FIELD QUALITY CONTROL

A. See Section 014000 - Quality Requirements, for general requirements for field inspection.

3.05 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.06 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION

SECTION 101400
SIGNAGE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Room and door signs.

B. Each door visible to the public shall be provided with signage.

1.02 RELATED REQUIREMENTS

A. Division 26: Exit signs required by code.

1.03 REFERENCE STANDARDS

A. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines current edition.

B. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design 2010.

C. ICC A117.1 - Accessible and Usable Buildings and Facilities 2017.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's printed product literature for each type of sign, indicating sign styles, font, foreground and background colors, locations, overall dimensions of each sign.

C. Signage Schedule: Provide information sufficient to completely define each sign for fabrication, including room number, room name, other text to be applied, sign and letter sizes, fonts, and colors.
   1. When room numbers to appear on signs differ from those on drawings, include the drawing room number on schedule.
   2. When content of signs is indicated to be determined later, request such information from Owner through Architect at least 2 months prior to start of fabrication; upon request, submit preliminary schedule.
   3. Submit for approval by Owner through Architect prior to fabrication.

D. Samples: Submit two samples of each type of sign, of size similar to that required for project, illustrating sign style, font, and method of attachment.

E. Selection Samples: Where colors are not specified, submit two sets of color selection charts or chips.

F. Verification Samples: Submit samples showing colors specified.

G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 016000 - Product Requirements, for additional provisions.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Package signs as required to prevent damage before installation.

B. Package room and door signs in sequential order of installation, labeled by floor or building.

C. Store tape adhesive at normal room temperature.

1.07 FIELD CONDITIONS

A. Do not install tape adhesive when ambient temperature is lower than recommended by manufacturer.

B. Maintain this minimum temperature during and after installation of signs.

PART 2 PRODUCTS

2.01 SIGNAGE APPLICATIONS

A. Accessibility Compliance: Signs are required to comply with ADA Standards and ICC A117.1, unless otherwise indicated; in the event of conflicting requirements, comply with the most comprehensive and specific requirements.

B. Room and Door Signs: Provide a sign for every doorway, whether it has a door or not, not including corridors, lobbies, and similar open areas.
   1. Sign Type: Flat signs with injection molded panel media as specified .
   2. Provide "tactile" signage, with letters raised minimum 1/32 inch (0.8 mm) and Grade II braille.
   3. Character Height: 1 inch (25 mm).
   4. Sign Height: 3 inches (75 mm), unless otherwise indicated. .
   5. Service Rooms: Identify with the room names and numbers indicated on drawings.
   6. Rest Rooms: Identify with pictograms, the names "MEN" and "WOMEN", and braille.

2.02 SIGN TYPES

1. Wall Mounting of One-Sided Signs: Tape adhesive.

B. Color and Font: Unless otherwise indicated:
   1. Character Font: Helvetica, Arial, or other sans serif font.
   2. Character Case: Upper case only.
   3. Background Color: As scheduled.
   4. Character Color: Contrasting color selected by the architect.

2.03 TACTILE SIGNAGE MEDIA

A. Engraved Panels: Laminated colored plastic; engraved through face to expose core as background color:

B. Injection Molded Panels: One-piece acrylic plastic, with raised letters and braille.
   1. Total Thickness: 1/8 inch.

2.04 ACCESSORIES

A. Concealed Screws: Stainless steel, galvanized steel, chrome plated, or other non-corroding metal.

B. Tape Adhesive: Double sided tape, permanent adhesive.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces are ready to receive work.

3.02 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install neatly, with horizontal edges level.

C. Locate signs and mount at heights indicated on drawings and in accordance with ADA Standards and ICC A117.1.

D. Protect from damage until Date of Substantial Completion; repair or replace damaged items.

END OF SECTION

SECTION 102113.13
METAL TOILET COMPARTMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Stainless Steel toilet compartments.

1.02 RELATED REQUIREMENTS

A. Section 102800 - Toilet, Bath, and Laundry Accessories.

1.03 REFERENCE STANDARDS

A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2020.

B. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar 2015.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate the work with placement of support framing and anchors in walls.

1.05 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate partition plan, elevation views, dimensions, details of wall, floor, and ceiling supports, door swings.

C. Product Data: Provide data on panel construction, hardware, and accessories.

D. Manufacturer's Installation Instructions: Indicate special procedures.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Stainless Steel Toilet Compartments:
   1. Basis of Design: Subject to compliance with the requirements, provide products, Sentinel, Series 400, of The Mills Company, Marion, OH 43302
   2. Contact Information: 1(800) 272-3539; www.bradleycorp.com

B. Accepted alternate manufacturers.
   1. ASI Accurate Partitions; Stainless Steel: www.asi-accuratepartitions.com/#sle.
   2. ASI Global Partitions; Stainless Steel: www.asi-globalpartitions.com/#sle.
   3. Substitutions: Section 016000 - Product Requirements.

2.02 MATERIALS

A. Steel Sheet: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G90/Z275 coating.

B. Stainless Steel Sheet: ASTM A666, Type 304.

2.03 COMPONENTS

A. Toilet Compartments: Powder coated steel, floor-mounted unbraced.

B. Doors, Panels, and Pilasters: Sheet steel faces, pressure bonded to sound deadening core, formed and closed edges; corners made with corner clips or mitered, welded, and ground smooth.
   1. Panel Faces: 20 gauge, 0.0359 inch (0.91 mm).
   2. Door Faces: 22 gauge, 0.0299 inch (0.76 mm).
   3. Pilaster Faces: 20 gauge, 0.0359 inch (0.91 mm).
   4. Reinforcement: 12 gauge, 0.1046 inch (2.66 mm).
   5. Internal Reinforcement: Provide in areas of attached hardware and fittings. Mark locations of reinforcement for partition mounted washroom accessories.

C. Door and Panel Dimensions:
   1. Thickness: 1 inch (25 mm).

2. Door Width: 24 inch (610 mm).
3. Door Width for Handicapped Use: 36 inch (915 mm) , out-swinging.
4. Height: 58 inch (1473 mm).

D. Pilasters: 1-1/4 inch (32 mm) thick, of sizes required to suit compartment width and spacing.

2.04 ACCESSORIES

A. Pilaster Shoes: Formed ASTM A666 Type 304 stainless steel with No. 4 finish, 3 inch (175 mm) high, concealing floor fastenings.
1. Provide adjustment for floor variations with screw jack through steel saddles integral with pilaster.

B. Head Rails: Hollow anodized aluminum tube, 1 by 1-5/8 inch (25 by 41 mm) size, with anti-grip strips and cast socket wall brackets.

C. Brackets: Full height Satin stainless steel.

D. Attachments, Screws, and Bolts: Stainless steel , tamper proof type.

E. Hardware: Polished stainless steel:
1. Self closing continuous spring loaded type adjustable to hold doors copen at any angle up to 90 degrees..
2. Thumb turn or sliding door latch with exterior emergency access feature.
3. Door strike and keeper with rubber bumper; mounted on pilaster in alignment with door latch.
4. Coat hook with rubber bumper; one per compartment, mounted on door.
5. Provide door pull on both sides of outswinging doors. Provide pulls on outside of inswinging doors.

F. Note: All fasteners shall be tamper resistant and stainless steel.

2.05 FINISHING

A. Stainless Steel Compartments: No. 4 finish or textured finish at Owners option.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that field measurements are as indicated.

C. Verify correct spacing of and between plumbing fixtures.

D. Verify correct location of built-in framing, anchorage, and bracing.

3.02 INSTALLATION

A. Install partitions secure, rigid, plumb, and level in accordance with manufacturer's instructions.

B. Maintain 3/8 to 1/2 inch (9 to 13 mm) space between wall and panels and between wall and end pilasters.

C. Attach panel brackets securely to walls using anchor devices.

D. Attach panels and pilasters to brackets. Locate head rail joints at pilaster center lines.

3.03 TOLERANCES

A. Maximum Variation From True Position: 1/4 inch (6 mm).

B. Maximum Variation From Plumb: 1/8 inch (3 mm).

3.04 ADJUSTING

A. Adjust and align hardware to uniform clearance at vertical edge of doors, not exceeding 3/16 inch (5 mm).

B. Adjust hinges to position doors in partial opening position when unlatched. Return out swinging doors to closed position.

C. Adjust adjacent components for consistency of line or plane.

END OF SECTION

SECTION 102800
TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Commercial toilet accessories.

B. Under-lavatory pipe supply covers.

C. Utility room accessories.

1.02 RELATED REQUIREMENTS

A. Section 102113.13 Metal Toilet Compartments

1.03 REFERENCE STANDARDS

A. ASTM C1036 - Standard Specification for Flat Glass 2021.

B. ASTM C1503 - Standard Specification for Silvered Flat Glass Mirror 2018.

C. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi 2015, with Editorial Revision (2021).

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with the placement of internal wall reinforcement, concealed ceiling supports, and reinforcement of toilet partitions to receive anchor attachments.

1.05 SUBMITTALS

A. Product Data: Submit data on accessories describing size, finish, details of function, and attachment methods.

B. Manufacturer's Installation Instructions: Indicate special procedures and conditions requiring special attention.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Commercial Toilet, Shower, and Bath Accessories:
   1. Bradley Corporation: www.bradleycorp.com/#sle.

B. Under-Lavatory Pipe Supply Covers:
   1. Truebro LAV GUARD2.

2.02 MATERIALS

A. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.

B. Mirror Glass: Annealed float glass, ASTM C1036 Type I, Class 1, Quality Q2, with silvering, protective and physical characteristics complying with ASTM C1503.

2.03 FINISHES

A. Stainless Steel: Satin finish, unless otherwise noted.

2.04 COMMERCIAL TOILET ACCESSORIES

A. Toilet Paper Dispenser: Dual Jumbo Roll Stainless Steel Toilet Paper Dispenser:
   1. Basis of Design: Georgia Pacific 12" Sr. Jumbo Bath Tissue Dispenser
   2. Architect's pre-apprroved equal.

B. Paper Towel Dispenser: Electric, roll paper type.
   1. Cover: Stainless steel.
   2. Paper Discharge: Touchless automatic.
   3. Capacity: 6 inch diameter roll.
   4. Mounting: Semi recessed.
   5. Power: Battery operated.

6. Refill Indicator: Illuminated refill indicator.
7. Products:
   a. Basis of Design: Georgia Pacific model #59460, enMotion Automated Touchless Dispenser.

C. Waste Receptacle: Shall be Owner provided and Contractor Installed.

D. Soap Dispenser: Shall be Owner provided and Contractor Installed.

E. Mirrors: Stainless steel framed, 1/4 inch (6 mm) thick annealed float glass; ASTM C1036.
1. Annealed Float Glass: Silvering, protective and physical characteristics in compliance with ASTM C1503.
2. Size: As shown on the Drawings.
3. Frame: 0.05 inch (1.3 mm)angle shapes, with mitered and welded and ground corners, and tamperproof hanging system; satin finish.

F. Seat Cover Dispenser
1. Basis of Design: Bobrick Model No. B-4221
2. Architect's Pre-Approved Equal

G. Grab Bars: Stainless steel, smooth surface.
1. Standard Duty Grab Bars:
   a. Push/Pull Point Load: 250 pound-force (1112 N), minimum.
   b. Dimensions: 1-1/2 inch (38 mm) outside diameter, minimum 0.05 inch (1.3 mm) wall thickness, exposed flange mounting, 1-1/2 inch (38 mm) clearance between wall and inside of grab bar.
   c. Length and Configuration: As indicated on drawings.

H. Combination Sanitary Napkin/Tampon Dispenser: Stainless steel, surface-mounted.
1. Door: Seamless 0.05 inch (1.3 mm) door with returned edges and tumbler lock.
2. Cabinet: Fully welded, 0.03 inch (0.8 mm) thick sheet.
3. Operation: 25 cent coin required to operate dispenser. Provide locked coin box, separately keyed.
4. Identify dispensers slots without using brand names.
5. Minimum capacity: 15 napkins and 20 tampons.
6. Approved Manufacturers:
   a. Bobrick Washroom Equipment.

I. Sanitary Napkin Disposal Unit: Stainless steel, surface-mounted, self-closing door, locking bottom panel with full-length stainless steel piano-type hinge, removable receptacle.
1. Products:
   a. Basis of Design:Rubbermaid 6140.
   b. Architect's Pre-Approved Equal

2.05 UNDER-LAVATORY PIPE AND SUPPLY COVERS

A. Under-Lavatory Pipe and Supply Covers:
1. Insulate exposed drainage piping including hot, cold, and tempered water supplies under lavatories or sinks to comply with ADA Standards.
2. Exterior Surfaces: Smooth non-absorbent, non-abrasive surfaces.
3. Construction: 1/8 inch (3.2 mm) flexible PVC.
   a. Microbial and Fungal Resistance: Comply with ASTM G21.
4. Color: White.
5. Fasteners: Reusable, snap-locking fasteners with no sharp or abrasive external surfaces.
6. Products:
   a. Plumberex Specialty Products, Inc; Plumberex Pro-Extreme: www.plumberex.com/#sle.
   b. Substitutions: Section 016000 - Product Requirements.

2.06 UTILITY ROOM ACCESSORIES

A. Combination Utility Shelf/Mop and Broom Holder: 0.05 inch (1.3 mm) thick stainless steel, Type 304, with 1/2 inch (12 mm) returned edges, 0.06 inch (1.6 mm) steel wall brackets.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify exact location of accessories for installation.

C. For electrically-operated accessories, verify that electrical power connections are ready and in the correct locations.

D. Verify that field measurements are as indicated on drawings.

3.02 PREPARATION

A. Deliver inserts and rough-in frames to site for timely installation.

B. Provide templates and rough-in measurements as required.

3.03 INSTALLATION

A. Install accessories in accordance with manufacturers' instructions in locations indicated on drawings.

B. Install plumb and level, securely and rigidly anchored to substrate.

C. Mounting Heights: As required by accessibility regulations, unless otherwise indicated.
   1. Grab Bars: As indicated on drawings.
   2. Electric Hand Dryers: Measured from floor to bottom of nozzle:
      a. Handicap: 36 inches (910 mm).
   3. Other Accessories: As indicated on drawings.

3.04 PROTECTION

A. Protect installed accessories from damage due to subsequent construction operations.

END OF SECTION

KIDS SPACE PARK
SHAWNEE, OKLAHOMA

SECTION 13120
METAL BUILDING SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Structural-steel framing.
2. Metal roof panels.
3. Metal wall panels (fascia at low slope)
4. Thermal Insulation.
5. Accessories.
6. Delegated Design for the slab and foundation system for the Metal Building System.
   a. Slab and Foundation design shall be in accordance with the Geotechnical Report

1.3 DEFINITIONS

A. Terminology Standard: See MBMA's "Metal Building Systems Manual" for definitions of terms for metal building system construction not otherwise defined in this Section or in referenced standards.

1.4 COORDINATION

A. Coordinate sizes and locations of concrete foundations and casting of anchor-rod inserts into foundation walls and footings. Anchor rod installation, concrete, reinforcement, and formwork requirements shall be a part of the Delegated Design responsibility of the Metal Building System Manufacturer and shall be in accordance with the requirements of the Geotechnical Report.

B. Coordinate metal panel assemblies with rain drainage work, flashing, trim, and construction of supports and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

1.5 SUBMITTALS

A. Product Data: For each type of metal building system component. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:

1. Structural-steel-framing system.
2. Metal roof panels.
3. Metal wall panels.
4. Thermal insulation.
5. Flashing and trim.

6. Accessories.

B. Shop Drawings: For the following metal building system components. Include plans, elevations, sections, details, and attachments to other work.

1. Anchor-Bolt Plans: Submit anchor-bolt plans and templates before foundation work begins. Include location, diameter, and projection of anchor bolts required to attach metal building to foundation. Indicate column reactions at each location.
2. Structural-Framing Drawings: Show complete fabrication of primary and secondary framing; include provisions for openings. Indicate welds and bolted connections, distinguishing between shop and field applications. Include transverse cross-sections.

3. Metal Roof and Wall Panel (fascia) Layout Drawings: Show layouts of metal panels including methods of support. Include details of edge conditions, joints, panel profiles, corners, anchorages, trim, flashings, closures, and special details. Distinguish between factory- and field-assembled work; show locations of exposed fasteners.

   a. Show roof-mounted items including pipe supports and penetrations, lighting fixtures, and all other applicable components of the facility.
   b. Show wall-mounted items including lighting fixtures.
   c. Show cantilevered roof systems.

4. Accessory Drawings: Include details of the following items, at a scale of not less than 1-1/2 inches per 12 inches (1:8):

   a. Flashing and trim.
   b. Gutters.
   c. Downspouts.
   d. Louvers.

C. Samples for Initial Selection: For units with factory-applied color finish.

D. Samples for Verification: For each type of exposed finish required, prepared on Samples of sizes indicated below:

1. Metal Panels: Nominal 12 inches (300 mm) long by actual panel width. Include fasteners, closures, and other exposed panel accessories.
2. Flashing and Trim: Nominal 12 inches (300 mm) long. Include fasteners and other exposed accessories.
3. Accessories: Nominal 12-inch- (300-mm-) long Samples for each type of accessory.

E. Delegated-Design Submittal: Provide complete metal building systems complying with industry standard performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
1. Provide delegated design submittal for all slab and foundation design in accordance with the requirements of the Geotechnical Report.
2. PEMB Engineer shall be the Engineer of Record for this structure. Submittal documents shall specifically list this information.

F. Qualification Data: For qualified erector, manufacturer, and professional engineer.

G. Welding certificates.

H. Metal Building System Certificates: For each type of metal building system, from manufacturer.

1. Letter of Design Certification: Signed and sealed by a qualified professional engineer. Include the following:

    a. Name and location of Project.
    b. Order number.
    c. Name of manufacturer.
    d. Name of Contractor.
    e. Building dimensions including width, length, height, and roof slope.
    f. Indicate compliance with AISC standards for hot-rolled steel and AISI standards for cold-rolled steel, including edition dates of each standard.
    g. Governing building code and year of edition.
    h. Design Loads: Include dead load, roof live load, collateral loads, roof snow load, deflection, wind loads/speeds and exposure, seismic design category or effective peak velocity-related acceleration/peak acceleration, and auxiliary loads (cranes).
    i. Load Combinations: Indicate that loads were applied acting simultaneously with concentrated loads, according to governing building code.
    j. Building-Use Category: Indicate category of building use and its effect on load importance factors.
    k. AISC Certification for Category MB: Include statement that metal building system and components were designed and produced in an AISC-Certified Facility by an AISC-Certified Manufacturer.
    l. Loading as required for manufacturers recommended ice and snow guards shall be provided as a part of the letter of certification.

I. Erector Certificates: For each product, from manufacturer.

J. Manufacturer Certificates: For each product, from manufacturer.

K. Material Test Reports: For each of the following products:

    1. Structural steel including chemical and physical properties.
    2. Bolts, nuts, and washers including mechanical properties and chemical analysis.
    3. Tension-control, high-strength, bolt-nut-washer assemblies.
    4. Shop primers.
    5. Nonshrink grout.

L. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for insulation and vapor-retarder facings. Include reports for thermal resistance, fire-test-response characteristics, water-vapor transmission, and water absorption.

M. Source quality-control reports.

N. Field quality-control reports.

O. Surveys: Show final elevations and locations of major members. Indicate discrepancies between actual installation and the Contract Documents. Have surveyor who performed surveys certify their accuracy.

P. Maintenance Data: For metal panel finishes to include in maintenance manuals.

Q. Warranties: Sample of special warranties.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer.

1. AISC Certification for Category MB: An AISC-Certified Manufacturer that designs and produces metal building systems and components in an AISC-Certified Facility.
2. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.

B. Land Surveyor Qualifications: A professional land surveyor who practices in jurisdiction where Project is located and who is experienced in providing surveying services of the kind indicated.

C. Erector Qualifications: An experienced erector who specializes in erecting and installing work similar in material, design, and extent to that indicated for this Project and who is acceptable to manufacturer.

D. Testing Agency Qualifications: Qualified according to ASTM E 329 for testing indicated.

E. Source Limitations: Obtain metal building system components, including primary and secondary framing and metal panel assemblies, from single source from single manufacturer.

F. Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
2. AWS D1.3, "Structural Welding Code - Sheet Steel."

G. Structural Steel: Comply with AISC 360, "Specification for Structural Steel Buildings," for design requirements and allowable stresses.

H. Cold-Formed Steel: Comply with AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" for design requirements and allowable stresses.

I. Preinstallation Conference: Conduct conference at Project site.

1. Review methods and procedures related to metal building systems including, but not limited to, the following:

a. Condition of foundations and other preparatory work performed by other trades.
b. Structural load limitations.
c. Construction schedule. Verify availability of materials and erector's personnel, equipment, and facilities needed to make progress and avoid delays.
d. Required tests, inspections, and certifications.
e. Unfavorable weather and forecasted weather conditions.

2. Review methods and procedures related to metal roof panel assemblies including, but not limited to, the following:

a. Compliance with requirements for purlin and rafter conditions, including flatness and attachment to structural members.
b. Structural limitations of purlins and rafters during and after roofing.
c. Flashings, special roof details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect metal roof panels.
d. Temporary protection requirements for metal roof panel assembly during and after installation.
e. Roof observation and repair after metal roof panel installation.

3. Review methods and procedures related to metal wall panel assemblies including, but not limited to, the following:

    a. Compliance with requirements for support conditions, including alignment between and attachment to structural members.
    b. Structural limitations of girts and columns during and after wall panel installation.
    c. Flashings, special siding details, wall penetrations, openings, and condition of other construction that will affect metal wall panels.
    d. Temporary protection requirements for metal wall panel assembly during and after installation.
    e. Wall observation and repair after metal wall panel installation.
    f. Size, Spacing and configuration of manufacturers recommended ice and snow guards.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, sheets, panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.

B. Unload, store, and erect metal panels in a manner to prevent bending, warping, twisting, and surface damage.

C. Stack metal panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal panels to ensure dryness, with positive slope for drainage of water. Do not store metal panels in contact with other materials that might cause staining, denting, or other surface damage.

1.8 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when weather conditions permit metal panels to be installed according to manufacturers' written instructions and warranty requirements.

B. Field Measurements:

1. Established Dimensions for Foundations: Comply with established dimensions on approved anchor-bolt plans, establishing foundation dimensions and proceeding with fabricating structural framing without field measurements. Coordinate anchor-bolt installation to ensure that actual anchorage dimensions correspond to established dimensions.
2. Established Dimensions for Metal Panels: Where field measurements cannot be made without delaying the Work, either establish framing and opening dimensions and proceed with fabricating metal panels without field measurements, or allow for field trimming metal panels. Coordinate construction to ensure that actual building dimensions, locations of structural members, and openings correspond to established dimensions.

1.9 COORDINATION

A. Coordinate sizes and locations of concrete foundations and casting of anchor-bolt inserts into foundation walls and footings. Concrete, reinforcement, and formwork requirements are specified in Division 03 Section "Cast-in-Place Concrete."

B. Coordinate installation of roof penetrations, which are specified in Division 07 Section "Roof Accessories."

C. Coordinate metal panel assemblies with rain drainage work, flashing, trim, and construction of supports and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

1.10 WARRANTY

A. Special Warranty on Metal Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:

a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Finish Warranty Period: 20 years from date of Substantial Completion.

B. Special Weathertightness Warranty for Standing-Seam Metal Roof Panels: Manufacturer's standard form in which manufacturer agrees to repair or replace standing-seam metal roof panel assemblies that leak or otherwise fail to remain weathertight within specified warranty period.

1. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Alliance Steel, Inc.
2. Butler Manufacturing Company; a BlueScope Steel company.
3. Star Building Systems; an NCI company.
4. Architect’s Pre-Approved Equal.

B. Source Limitations: Obtain metal building system components, including primary and secondary framing and metal panel assemblies, from single source from single manufacturer.

2.2 METAL BUILDING SYSTEMS

A. Description: Provide a complete, integrated set of mutually dependent components and assemblies that form a metal building system capable of withstanding structural and other loads, thermally induced movement, and exposure to weather without failure or infiltration of water into building interior.

1. Provide metal building system of size and with bay spacings, roof slopes, and spans indicated on the construction drawings.

B. Primary-Frame Type:

1. Rigid Clear Span: Solid-member, structural-framing system without interior columns.
   a. Refer to documents for additional information.
   b. Provide varied length cantilevered structural systems as shown in the documents.

C. End-Wall Framing: Shall be rigid clear span as shown on the documents.
1. There is no additional end wall structural or secondary framing.

D. Secondary-Frame Type: Manufacturer's standard roof purlins as shown in the documents.
1. There shall be no framing extending lower than the ceiling / soffit liner panel.
2. There shall be no exterior-framed girts.
3. There shall be no intermediate portal framing. Structural columns and lateral resistance shall be accommodated with the tapered rigid frames as shown in the drawings.
4. There shall be no cable bracing or ‘x’ bracing. Structural columns and lateral resistance shall be accommodated with the tapered rigid frames as shown in the drawings.

E. Eave Height: Refer Construction Drawings for exact dimensions.
1. Provide varied length cantilevered roof framing systems as shown in the documents.

F. Bay Spacing: As noted on the construction documents.

G. Roof Slope: As noted on the construction documents.

H. Roof System: Manufacturer's standard standing-seam metal roof panels – design and profile as required for the indicated spans and use and as required to remain weathertight.

I. Exterior Wall System: N/A

2.3 METAL BUILDING SYSTEM PERFORMANCE

A. Delegated Design: Design metal building system, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

B. Structural Performance: Metal building systems shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to procedures in MBMA's "Metal Building Systems Manual."

1. Design Loads: As required for the location and applicable codes / ordinances.

2. Deflection and Drift Limits: Design metal building system assemblies to withstand serviceability design loads without exceeding deflections and drift limits recommended in AISC Steel Design Guide No. 3 "Serviceability Design Considerations for Steel Buildings."

3. Metal panel assemblies shall withstand the effects of gravity loads and loads and stresses within limits and under conditions indicated according to ASTM E 1592.

C. Seismic Performance: Metal building systems shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

D. Thermal Movements: Allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base engineering calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120 deg F (67 deg C), ambient; material surfaces.

E. Air Infiltration for Metal Roof Panels: N/A

F. Air Infiltration for Metal Wall Panels: N/A

G. Water Penetration for Metal Roof Panels: No water penetration when tested according to ASTM E 1646 at test-pressure difference of 2.86 lbf/sq. ft. (137 Pa).

H. Water Penetration for Metal Wall Panels: N/A

I. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for Class 60.

2.4 STRUCTURAL-STEEL FRAMING

A. General: All framing systems and accessories shall be the responsibility of the Metal Building System Engineer of Record as required to meet the design of the building as documented.

B. Primary Framing: Manufacturer's standard primary-framing system, designed to withstand required loads and specified requirements. Refer to drawings for Framing basis of design.

1. General: Provide frames with attachment plates, bearing plates, and splice members. Factory drill for field-bolted assembly. Provide frame span and spacing indicated.

a. Slight variations in span and spacing may be acceptable if necessary to comply with manufacturer's standard, as approved by Architect.

2. Rigid Clear-Span Frames: I-shaped frame sections fabricated from shop-welded, built-up steel plates or structural-steel shapes. Interior columns are not permitted.
3. Frame Configuration: Single Slope – refer to drawings.
4. Exterior Column Type: Tapered – refer to drawings
5. Rafter Type: Not Tapered – refer to drawings.

C. End-Wall Framing: Refer to drawings for End Wall Framing basis of design.

D. Secondary Framing: Manufacturer's standard secondary framing, including purlins, girts, eave struts, flange bracing, base members, gable angles, clips, headers, jambs, and other miscellaneous structural members. Unless otherwise indicated, fabricate framing from either cold-formed, structural-steel sheet or roll-formed, metallic-coated steel sheet, prepainted with coil coating, to comply with the following:

1. Purlins: C- or Z-shaped sections; fabricated from built-up steel plates, steel sheet, or structural-steel shapes; minimum 2-1/2-inch- (64-mm-) wide flanges.

    a. Depth: as required by metal building manufacturer design.

2. Girts:

E. Bracing: N/A. There shall be no rod, cable, angle, portal or other bracing other than metal frames as shown in the drawings. Structural columns and lateral resistance shall be accommodated with the tapered rigid frames as shown in the drawings

F. Bolts: Provide plain-finish bolts for structural-framing components that are primed or finish painted. Provide zinc-plated or hot-dip galvanized bolts for structural-framing components that are galvanized.

G. Materials:

1. W-Shapes: ASTM A 992/A 992M; ASTM A 572/A 572M, Grade 50 or 55 (345 or 380); or ASTM A 529/A 529M, Grade 50 or 55 (345 or 380).
2. Channels, Angles, M-Shapes, and S-Shapes: ASTM A 36/A 36M; ASTM A 572/A 572M, Grade 50 or 55 (345 or 380); or ASTM A 529/A 529M, Grade 50 or 55 (345 or 380).
3. Plate and Bar: ASTM A 36/A 36M; ASTM A 572/A 572M, Grade 50 or 55 (345 or 380); or ASTM A 529/A 529M, Grade 50 or 55 (345 or 380).
4. Steel Pipe: ASTM A 53/A 53M, Type E or S, Grade B.
5. Cold-Formed Hollow Structural Sections: ASTM A 500, Grade B or C, structural tubing.
6. Structural-Steel Sheet: Hot-rolled, ASTM A 1011/A 1011M, Structural Steel (SS), Grades 30 through 55 (205 through 380), or High-Strength Low-Alloy Steel (HSLAS), Grades 45 through 70 (310 through 480); or cold-rolled, ASTM A 1008/A 1008M, Structural Steel (SS), Grades 25 through 80 (170 through 550), or High-Strength Low-Alloy Steel (HSLAS), Grades 45 through 70 (310 through 480).
7. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Structural Steel (SS), Grades 33 through 80 (230 through 550), or High-Strength Low-Alloy Steel (HSLAS), Grades 50 through 80 (340 through 550); with G60 (Z180) coating designation; mill phosphatized.
8. Metallic-Coated Steel Sheet Prepainted with Coil Coating: Steel sheet, metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.

    a. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, Structural Steel (SS), Grades 33 through 80 (230 through 550), or High-Strength Low-Alloy Steel (HSLAS), Grades 50 through 80 (340 through 550); with G90 (Z275) coating designation.
    b. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, Structural Steel (SS), Grade 50 or 80 (340 or 550); with Class AZ50 (AZM150) coating.
9. Non-High-Strength Bolts, Nuts, and Washers: ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6), carbon-steel, hex-head bolts; ASTM A 563 (ASTM A 563M) carbon-steel hex nuts; and ASTM F 844 plain (flat) steel washers.

    a. Finish: Plain.

10. High-Strength Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, heavy-hex steel structural bolts; ASTM A 563 (ASTM A 563M) heavy-hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M) hardened carbon-steel washers.

    a. Finish: Plain.

11. High-Strength Bolts, Nuts, and Washers: ASTM A 490 (ASTM A 490M), Type 1, heavy-hex steel structural bolts or tension-control, bolt-nut-washer assemblies with spline ends; ASTM A 563 (ASTM A 563M) heavy-hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M) hardened carbon-steel washers, plain.
12. Tension-Control, High-Strength Bolt-Nut-Washer Assemblies: ASTM F 1852, Type 1, heavy-hex-head steel structural bolts with spline ends.

    a. Finish: Plain.

13. Unheaded Anchor Rods: ASTM F 1554, Grade 36, ASTM A 36/A 36M, or ASTM A 307, Grade A.

    a. Configuration: Straight.
    b. Nuts: ASTM A 563 (ASTM A 563M) hex carbon steel.
    c. Plate Washers: ASTM A 36/A 36M carbon steel.
    d. Washers: ASTM F 436 (ASTM F 436M) hardened carbon steel.
    e. Finish: Plain.

14. Headed Anchor Rods: ASTM F 1554, Grade 36, or ASTM A 307, Grade A.

    a. Configuration: Straight.
    b. Nuts: ASTM A 563 (ASTM A 563M) hex carbon steel.
    c. Plate Washers: ASTM A 36/A 36M carbon steel.
    d. Washers: ASTM F 436 (ASTM F 436M) hardened carbon steel.
    e. Finish: Plain.

15. Threaded Rods (in the plane of the roof structure only): ASTM A 36/A 36M, ASTM A 307, Grade A.

    a. Nuts: ASTM A 563 (ASTM A 563M) hex carbon steel.
    b. Washers: ASTM A 36/A 36M carbon steel.
    c. Finish: Plain.

16. Recycled Content of Steel Products: Provide steel products with an average recycled content so postconsumer recycled content plus one-half of preconsumer recycled content is not less than 25 percent.

H. Finish: Factory primed. Apply specified primer immediately after cleaning and pretreating.

1. Apply primer to primary and secondary framing to a minimum dry film thickness of 1 mil (0.025 mm).

    a. Prime secondary framing formed from uncoated steel sheet to a minimum dry film thickness of 0.5 mil (0.013 mm) on each side.

2. Primer: SSPC-Paint 15, Type I, red oxide.

2.5 METAL ROOF PANELS

A. Standing Seam trapezoidal ribbed metal roof panels: Formed with raised, trapezoidal major ribs and intermediate stiffening ribs symmetrically spaced between major ribs; designed to be installed by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps. Minimum 1/2” x 3/32” tape sealer shall be used at all panel side laps.

1. Basis of Design Product: PBR Panel as manufactured by MBCI Metal Wall and Roof Systems.

2. Material: Zinc-coated (galvanized) steel sheet, 0.028-inch (0.71-mm) nominal thickness.

   a. Exterior Finish: Fluoropolymer.
   b. Color: As selected by Architect from manufacturer's full range.

3. Major-Rib Spacing: 12 inches (305 mm) o.c.
4. Panel Coverage: 36 inches (914 mm).
5. Panel Height: 1.25 inches (32 mm).

B. Materials:

1. Metallic-Coated Steel Sheet: Restricted-flatness steel sheet, metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.

   a. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation; structural quality.
   b. Surface: Smooth, flat finish.

C. Finishes:

1. Exposed Coil-Coated Finish:

   a. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

2. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

2.6 METAL WALL PANELS (Fascia of Low Slope).

A. Standing Seam trapezoidal ribbed metal wall panels: Formed with raised, trapezoidal major ribs and intermediate stiffening ribs symmetrically spaced between major ribs; designed to be installed by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps. Minimum 1/2” x 3/32” tape sealer shall be used at all panel side laps.

1. Basis of Design Product: PBR Panel as manufactured by MBCI Metal Wall and Roof Systems.

2. Material: Zinc-coated (galvanized) steel sheet, 0.028-inch (0.71-mm) nominal thickness.

   a. Exterior Finish: Fluoropolymer.
   b. Color: As selected by Architect from manufacturer's full range.

3. Major-Rib Spacing: 12 inches (305 mm) o.c.
4. Panel Coverage: 36 inches (914 mm).

5. Panel Height: 1.25 inches (32 mm).

B. Flush-Profile, Metal Ceiling / Soffit Liner Panels: solid panels formed with vertical panel edges and flat pan between panel edges; with flush joint between panels; designed for interior side of metal wall panel assemblies and installed by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners and factory-applied sealant in side laps. Basis of Design shall be FW-120-0 as manufactured by MBCI Metal Wall and Roof Systems.

1. Material: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, .024 nch nominal uncoated steel thickness. Prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
2. Panel Coverage: 12 inches
3. Panel Height: 1.5 inches

C. Finishes:

1. Exposed Coil-Coated Finish:

a. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

2. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

2.7 THERMAL INSULATION

A. Faced Metal Building Roof and Wall Insulation: ASTM C 991, Type II, glass-fiber-blanket insulation; 0.5-lb/cu. ft. (8-kg/cu. m) density; 2-inch- (51-mm-) wide, continuous, vapor-tight edge tabs; with a flame-spread index of 25 or less.
1. Roof insulation shall be 4” thick standard faced metal building insulation with a thermal block at the roof purlin..

B. Vapor-Retarder Tape: Pressure-sensitive tape of type recommended by vapor-retarder manufacturer for sealing joints and penetrations in vapor retarder.

2.8 ACCESSORIES

A. General: Provide accessories as standard with metal building system manufacturer and as specified. Fabricate and finish accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes. Comply with indicated profiles and with dimensional and structural requirements.

1. Form exposed sheet metal accessories that are without excessive oil-canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.

B. Roof Panel Accessories: Provide components required for a complete metal roof panel assembly including copings, fasciae, corner units, ridge closures, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels unless otherwise indicated.

1. Closures: Provide closures at eaves and ridges, fabricated of same material as metal roof panels.
2. Clips: Manufacturer's standard, formed from steel sheet, designed to withstand negative-load requirements.
3. Cleats: Manufacturer's standard, mechanically seamed cleats formed from steel sheet.
4. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
5. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- (25-mm-) thick, flexible closure strips; cut or premolded to match metal roof panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.
6. Thermal Spacer Blocks: Where metal panels attach directly to purlins, provide thermal spacer blocks of thickness required to provide 1-inch (25-mm) standoff; fabricated from extruded polystyrene.

C. Wall Panel Accessories: Provide components required for a complete metal wall panel assembly including copings, fasciae, , clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal wall panels unless otherwise indicated.

1. Closures: Provide closures at eaves and rakes, fabricated of same material as metal wall panels.
2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
3. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- (25-mm-) thick, flexible closure strips; cut or premolded to match metal wall panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

D. Flashing and Trim: Formed from 0.022-inch (0.56-mm) nominal-thickness, metallic-coated steel sheet or aluminum-zinc alloy-coated steel sheet prepainted with coil coating; finished to match adjacent metal panels.

1. Provide flashing and trim as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers.
2. Opening Trim: Formed from 0.022-inch (0.56-mm) nominal-thickness, metallic-coated steel sheet or aluminum-zinc alloy-coated steel sheet prepainted with coil coating. Trim head and jamb of door openings, and head, jamb, and sill of other openings.

E. Gutters: Formed from 0.022-inch (0.56-mm) nominal-thickness, metallic-coated steel sheet or aluminum-zinc alloy-coated steel sheet prepainted with coil coating; finished to match roof fascia and rake trim. Match profile of gable trim, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- (2438-mm-) long sections, sized according to SMACNA's "Architectural Sheet Metal Manual."

1. Gutter Supports: Fabricated from same material and finish as gutters.
2. Strainers: Bronze, copper, or aluminum wire ball type at outlets.

F. Downspouts: Formed from 0.022-inch (0.56-mm) nominal-thickness, zinc-coated (galvanized) steel sheet or aluminum-zinc alloy-coated steel sheet prepainted with coil coating; finished to

match metal wall panels. Fabricate in minimum 10-foot- (3-m-) long sections, complete with formed elbows and offsets.

1. Mounting Straps: Fabricated from same material and finish as gutters.

G. Pipe Flashing: Premolded, EPDM pipe collar with flexible aluminum ring bonded to base.

H. Ice and Snow Guards: Provide manufacturers recommended ice and snow guards for each building, specific to the building configuration and the panel type.

I. Materials:

1. Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads. Provide fasteners with heads matching color of materials being fastened by means of plastic caps or factory-applied coating.

   a. Fasteners for Metal Roof Panels: Self-drilling or self-tapping, zinc-plated, hex-head carbon-steel screws, with a stainless-steel cap or zinc-aluminum-alloy head and EPDM sealing washer.
   b. Fasteners for Metal Wall Panels: Self-drilling or self-tapping, zinc-plated, hex-head carbon-steel screws, with EPDM sealing washers bearing on weather side of metal panels.
   c. Fasteners for Flashing and Trim: Blind fasteners or self-drilling screws with hex washer head.
   d. Blind Fasteners: High-strength aluminum or stainless-steel rivets.

2. Corrosion-Resistant Coating: Cold-applied asphalt mastic, compounded for 15-mil (0.4-mm) dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.
3. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107, factory-packaged, nonmetallic aggregate grout, noncorrosive, nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.
4. Metal Panel Sealants:

   a. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene-compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape of manufacturer's standard size.
   b. Joint Sealant: ASTM C 920; one-part elastomeric polyurethane or polysulfide; of type, grade, class, and use classifications required to seal joints in metal panels and remain weathertight; and as recommended by metal building system manufacturer.

2.9 SOURCE QUALITY CONTROL

A. Special Inspector: Owner will engage a qualified special inspector to perform the following tests and inspections and to submit reports. Special inspector will verify that manufacturer maintains detailed fabrication and quality-control procedures and will review the completeness and adequacy of those procedures to perform the Work.

1. Special inspections will not be required if fabrication is performed by manufacturer registered and approved by authorities having jurisdiction to perform such Work without special inspection.

a. After fabrication, submit copy of certificate of compliance to authorities having jurisdiction, certifying that Work was performed according to Contract requirements.

B. Testing: Test and inspect shop connections for metal buildings according to the following:

1. Bolted Connections: Shop-bolted connections shall be inspected according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
2. Welded Connections: In addition to visual inspection, shop-welded connections shall be tested and inspected according to AWS D1.1/D1.1M and the following inspection procedures, at inspector's option:

a. Liquid Penetrant Inspection: ASTM E 165.
b. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.
c. Ultrasonic Inspection: ASTM E 164.
d. Radiographic Inspection: ASTM E 94.

C. Product will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

2.10 FABRICATION

A. General: Design components and field connections required for erection to permit easy assembly.

1. Mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams, and instruction manuals.
2. Fabricate structural framing to produce clean, smooth cuts and bends. Punch holes of proper size, shape, and location. Members shall be free of cracks, tears, and ruptures.

B. Tolerances: Comply with MBMA's "Metal Building Systems Manual" for fabrication and erection tolerances.

C. Primary Framing: Shop fabricate framing components to indicated size and section, with baseplates, bearing plates, stiffeners, and other items required for erection welded into place. Cut, form, punch, drill, and weld framing for bolted field assembly.

1. Make shop connections by welding or by using high-strength bolts.
2. Join flanges to webs of built-up members by a continuous, submerged arc-welding process.
3. Brace compression flange of primary framing with steel angles or cold-formed structural tubing between frame web and purlin web or girt web, so flange compressive strength is within allowable limits for any combination of loadings.
4. Weld clips to frames for attaching secondary framing.
5. Shop Priming: Prepare surfaces for shop priming according to SSPC-SP 2. Shop prime primary framing with specified primer after fabrication.

D. Secondary Framing: Shop fabricate framing components to indicated size and section by roll-forming or break-forming, with baseplates, bearing plates, stiffeners, and other plates required for erection welded into place. Cut, form, punch, drill, and weld secondary framing for bolted field connections to primary framing.

1. Make shop connections by welding or by using non-high-strength bolts.
2. Shop Priming: Prepare uncoated surfaces for shop priming according to SSPC-SP 2. Shop prime uncoated secondary framing with specified primer after fabrication.

E. Metal Panels: Fabricate and finish metal panels at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.

1. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of metal panel.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with erector present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Before erection proceeds, survey elevations and locations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments to receive structural framing, with erector present, for compliance with requirements and metal building system manufacturer's tolerances.

1. Engage land surveyor to perform surveying.

C. Proceed with erection only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition.

B. Provide temporary shores, guys, braces, and other supports during erection to keep structural framing secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural framing, connections, and bracing are in place unless otherwise indicated.

3.3 ERECTION OF STRUCTURAL FRAMING

A. Erect metal building system according to manufacturer's written erection instructions and erection drawings.

B. Do not field cut, drill, or alter structural members without written approval from metal building system manufacturer's professional engineer.

C. Set structural framing accurately in locations and to elevations indicated, according to AISC specifications referenced in this Section. Maintain structural stability of frame during erection.

D. Base and Bearing Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.

1. Set plates for structural members on wedges, shims, or setting nuts as required.
2. Tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
3. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.

E. Align and adjust structural framing before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with framing. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.

1. Level and plumb individual members of structure.
2. Make allowances for difference between temperature at time of erection and mean temperature when structure will be completed and in service.

F. Primary Framing and End Walls: Erect framing level, plumb, rigid, secure, and true to line. Level baseplates to a true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use grout to obtain uniform bearing and to maintain a level base-line elevation. Moist-cure grout for not less than seven days after placement.

1. Make field connections using high-strength bolts installed according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for bolt type and joint type specified.

    a. Joint Type: Snug tightened or pretensioned.

G. Secondary Framing: Erect framing level, plumb, rigid, secure, and true to line. Field bolt secondary framing to clips attached to primary framing.

1. Provide rake or gable purlins with tight-fitting closure channels and fasciae.
2. Locate and space wall girts to suit openings such as doors and windows.
3. Locate canopy framing as indicated.
4. Provide supplemental framing at entire perimeter of openings, including doors, windows, louvers, ventilators, and other penetrations of roof and walls.

H. Bracing: Install bracing in roof and sidewalls where indicated on erection drawings.

1. Tighten rod and cable bracing to avoid sag.
2. Locate interior end-bay bracing only where indicated.

I. Framing for Openings: Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to structural framing.

J. Erection Tolerances: Maintain erection tolerances of structural framing within AISC 303.

3.4 METAL PANEL INSTALLATION, GENERAL

A. Examination: Examine primary and secondary framing to verify that structural-panel support members and anchorages have been installed within alignment tolerances required by manufacturer.

1. Examine roughing-in for components and systems penetrating metal panels, to verify actual locations of penetrations relative to seams before metal panel installation.

B. General: Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Field cut metal panels as required for doors, windows, and other openings. Cut openings as small as possible, neatly to size required, and without damage to adjacent metal panel finishes.

a. Field cutting of metal panels by torch is not permitted unless approved in writing by manufacturer.

2. Install metal panels perpendicular to structural supports unless otherwise indicated.
3. Flash and seal metal panels with weather closures at perimeter of openings and similar elements. Fasten with self-tapping screws.
4. Locate and space fastenings in uniform vertical and horizontal alignment.
5. Locate metal panel splices over, but not attached to, structural supports with end laps in alignment.
6. Lap metal flashing over metal panels to allow moisture to run over and off the material.

C. Lap-Seam Metal Panels: Install screw fasteners using power tools with controlled torque adjusted to compress EPDM washers tightly without damage to washers, screw threads, or metal panels. Install screws in predrilled holes.

1. Arrange and nest side-lap joints so prevailing winds blow over, not into, lapped joints. Lap ribbed or fluted sheets one full rib corrugation. Apply metal panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line.

D. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with corrosion-resistant coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by metal roof panel manufacturer.

E. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of metal panel assemblies. Provide types of gaskets, fillers, and sealants indicated; or, if not indicated, provide types recommended by metal panel manufacturer.

1. Seal metal panel end laps with double beads of tape or sealant the full width of panel. Seal side joints where recommended by metal panel manufacturer.
2. Prepare joints and apply sealants to comply with requirements in Division 07 Section "Joint Sealants."

3.5 METAL ROOF PANEL INSTALLATION

A. General: Provide metal roof panels of full length from eave to ridge unless otherwise indicated or restricted by shipping limitations.

1. Install ridge and hip caps as metal roof panel work proceeds.
2. Flash and seal metal roof panels with weather closures at eaves and rakes. Fasten with self-tapping screws.

B. Lap-Seam Metal Roof Panels: Fasten metal roof panels to supports with exposed fasteners at each lapped joint, at location and spacing recommended by manufacturer.

1. Provide metal-backed sealing washers under heads of exposed fasteners bearing on weather side of metal roof panels.
2. Provide sealant tape at lapped joints of metal roof panels and between panels and protruding equipment, vents, and accessories.
3. Apply a continuous ribbon of sealant tape to weather-side surface of fastenings on end laps and on side laps of nesting-type metal panels, on side laps of ribbed or fluted metal panels, and elsewhere as needed to make metal panels weatherproof to driving rains.
4. At metal panel splices, nest panels with minimum 6-inch (152-mm) end lap, sealed with butyl-rubber sealant and fastened together by interlocking clamping plates.

C. Metal Fascia Panels: Align bottom of metal panels and fasten with blind rivets, bolts, or self-drilling or self-tapping screws. Flash and seal metal panels with weather closures where fasciae meet soffits, along lower panel edges, and at perimeter of all openings.

D. Metal Roof Panel Installation Tolerances: Shim and align metal roof panels within installed tolerance of 1/4 inch in 20 feet (6 mm in 6 m) on slope and location lines as indicated and within 1/8-inch (3-mm) offset of adjoining faces and of alignment of matching profiles.

3.6 METAL WALL PANEL INSTALLATION

A. General: Install metal wall panels in orientation, sizes, and locations indicated on Drawings. Install panels perpendicular to girts, extending full height of building, unless otherwise indicated. Anchor metal wall panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Unless otherwise indicated, begin metal panel installation at corners with center of rib lined up with line of framing.
2. Shim or otherwise plumb substrates receiving metal wall panels.
3. When two rows of metal panels are required, lap panels 4 inches (102 mm) minimum.
4. When building height requires two rows of metal panels at gable ends, align lap of gable panels over metal wall panels at eave height.
5. Rigidly fasten base end of metal wall panels and allow eave end free movement due to thermal expansion and contraction. Predrill panels.
6. Flash and seal metal wall panels with weather closures at eaves, rakes, and at perimeter of all openings. Fasten with self-tapping screws.
7. Install screw fasteners in predrilled holes.
8. Install flashing and trim as metal wall panel work proceeds.
9. Apply elastomeric sealant continuously between metal base channel (sill angle) and concrete, and elsewhere as indicated; or, if not indicated, as necessary for waterproofing.
10. Align bottom of metal wall panels and fasten with blind rivets, bolts, or self-drilling or self-tapping screws.

B. Metal Wall Panels: Install metal wall panels on exterior side of girts and metal liner panels on the inside of girts. Attach metal wall panels to supports with fasteners as recommended by manufacturer. Provide metal closure trim at interior surfaces of metal liner panels.

C. Installation Tolerances: Shim and align metal wall panels within installed tolerance of 1/4 inch in 20 feet (6 mm in 6 m), nonaccumulative, on level, plumb, and on location lines as indicated, and within 1/8-inch (3-mm) offset of adjoining faces and of alignment of matching profiles.

3.7 THERMAL INSULATION INSTALLATION

A. General: Install insulation concurrently with metal panel installation, in thickness indicated to cover entire surface, according to manufacturer's written instructions.

1. Set vapor-retarder-faced units with vapor retarder toward warm side of construction unless otherwise indicated. Do not obstruct ventilation spaces except for firestopping.
2. Tape joints and ruptures in vapor retarder, and seal each continuous area of insulation to the surrounding construction to ensure airtight installation.
3. Install factory-laminated, vapor-retarder-faced blankets straight and true in one-piece lengths, with both sets of facing tabs sealed, to provide a complete vapor retarder.

B. Blanket Roof Insulation (4” metal building insulation): Comply with the following installation method:

1. Over-Framing Installation: Extend insulation and vapor retarder over and perpendicular to top flange of secondary framing. Hold in place by metal roof panels fastened to secondary framing.

3.8 ACCESSORY INSTALLATION

A. General: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal roof panel assembly, including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
2. Install components for a complete metal wall panel assembly, including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
3. Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with corrosion-resistant coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by manufacturer.

B. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

1. Install exposed flashing and trim that is without excessive oil-canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance.
2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (600 mm) of corner or intersection. Where lapped or bayonet-type expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

C. Gutters: Join sections with riveted-and-soldered or lapped-and-sealed joints. Attach gutters to eave with gutter hangers spaced as required for gutter size, but not more than 36 inches (914

mm) o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.

D. Downspouts: Join sections with 1-1/2-inch (38-mm) telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inches (1524 mm) o.c. in between.

1. Provide elbows at base of downspouts to direct water away from building.

E. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to panel as recommended by manufacturer.

3.9 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:

1. Inspection of fabricators.
2. Steel construction.
3. Field welds.

B. Tests and Inspections:

1. High-Strength, Field-Bolted Connections: Connections shall be inspected during installation according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
2. Welded Connections: In addition to visual inspection, field-welded connections shall be tested and inspected according to AWS D1.1/D1.1M and the following inspection procedures, at inspector's option:

a. Liquid Penetrant Inspection: ASTM E 165.
b. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.
c. Ultrasonic Inspection: ASTM E 164.
d. Radiographic Inspection: ASTM E 94.

C. Product will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

3.10 ADJUSTING

A. Doors: After completing installation, test and adjust doors to operate easily, free of warp, twist, or distortion.

3.11 CLEANING AND PROTECTION

A. Repair damaged galvanized coatings on galvanized items with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.

B. Touchup Painting: After erection, promptly clean, prepare, and prime or reprime field connections, rust spots, and abraded surfaces of prime-painted structural framing, bearing plates, and accessories.

1. Clean and prepare surfaces by SSPC-SP 2, "Hand Tool Cleaning," or by SSPC-SP 3, "Power Tool Cleaning."
2. Apply a compatible primer of same type as shop primer used on adjacent surfaces.

C. Touchup Painting: Cleaning and touchup painting are specified in Division 09 painting Sections.

D. Metal Panels: Remove temporary protective coverings and strippable films, if any, as metal panels are installed. On completion of metal panel installation, clean finished surfaces as recommended by metal panel manufacturer. Maintain in a clean condition during construction.

1. Replace metal panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

E. Doors and Frames: Immediately after installation, sand rusted or damaged areas of prime coat until smooth and apply touchup of compatible air-drying primer.

1. Immediately before final inspection, remove protective wrappings from doors and frames.

F. Louvers: Clean exposed surfaces that are not protected by temporary covering, to remove fingerprints and soil during construction period. Do not let soil accumulate until final cleaning.

1. Restore louvers damaged during installation and construction period so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by Architect, remove damaged units and replace with new units.

a. Touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with, factory-applied finish coating.

END OF SECTION 133419

SECTION 313116
TERMITE CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Chemical soil treatment.

1.02 RELATED REQUIREMENTS

A. Section 033000 - Cast-in-Place Concrete: Vapor barrier placement under concrete slab-on-grade.

1.03 PRICE AND PAYMENT PROCEDURES

A. See Section 012200 - Unit Prices, for additional unit price requirements.

1.04 REFERENCE STANDARDS

A. Title 7, United States Code, 136 through 136y - Federal Insecticide, Fungicide and Rodenticide Act 2019.

1.05 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

B. Product Data: Indicate toxicants to be used, composition by percentage, dilution schedule, intended application rate.

C. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements.

D. Test Reports: Indicate regulatory agency approval reports when required.

E. Certificate of compliance from authority having jurisdiction indicating approval of toxicants.

F. Manufacturer's Instructions: Indicate caution requirement.

G. Record and document moisture content of soil before application.

H. Installer Qualifications: Company specializing in performing work of the type specified and with minimum three (3) years of documented experience.

I. Warranty: Submit warranty and ensure that forms have been completed in Owner's name.

1.06 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing this type of work and:
   1. Having minimum of three (3) years documented experience.
   2. Approved by manufacturer of treatment materials.
   3. Licensed in the State in which the Project is located.

1.07 WARRANTY

A. See Section 017800 - Closeout Submittals, for additional warranty requirements.

B. Provide five year installer's warranty against damage to building caused by termites.

PART 2 PRODUCTS

2.01 CHEMICAL SOIL TREATMENT

A. Toxicant Chemical: EPA Title 7, United States Code, 136 through 136y approved; synthetically color dyed to permit visual identification of treated soil.

B. Diluent: Recommended by toxicant manufacturer.

C. Manufacturers:
   1. Bayer Environmental Science Corp; [____]: www.backedbybayer.com/pest-management/#sle.Bayer Environmental Science Corp; [____]: www.backedbybayer.com/pest-management/#sle.Bayer Environmental Science Corp; [____]: www.backedbybayer.com/pest-management/#sle.
   2. Substitutions: See Section 016000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that soil surfaces are unfrozen, sufficiently dry to absorb toxicant, and ready to receive treatment.

B. Verify final grading is complete.

3.02 APPLICATION - CHEMICAL TREATMENT

A. Comply with requirements of U.S. EPA and applicable state and local codes.

B. Spray apply toxicant in accordance with manufacturer's instructions.

C. Apply toxicant at following locations:
   1. Under Slabs-on-Grade.
   2. At Both Sides of Foundation Surface.
   3. Soil Within 10 feet (3 m) of Building Perimeter For a Depth of [____] feet ([____] m).

D. Under slabs, apply toxicant immediately prior to installation of vapor barrier.

E. At foundation walls, apply toxicant immediately prior to finish grading work outside foundations.

F. Apply extra treatment to structure penetration surfaces such as pipe or ducts, and soil penetrations such as grounding rods or posts.

G. Re-treat disturbed treated soil with same toxicant as original treatment.

H. If inspection or testing identifies the presence of termites, re-treat soil and re-test.

3.03 PROTECTION

A. Do not permit soil grading over treated work.

END OF SECTION

ADDENDUM NUMBER ONE
TO
CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR
KIDS SPACE PARK IMPROVEMENTS

Dated: March 17, 2022

The following changes, clarifications and/or additions are hereby made a part of the contract documents for the construction of this project, as fully and completely as if the same were originally included therein, and shall supersede anything contained in the plans and specifications with which it might conflict.

1. **PROJECT ADDRESS:**
   The project address is 10320 East 116th Street North Owasso, OK 74055.

2. **EXCEL VERSION OF BID FORM:**
   An Excel Copy of the Bid Form has been placed in the Shared Folder for this project and has been attached to the email Addendum. Contractor is responsible for verifying all quantities, formulas, etc. This is for information purposes only.

3. **REVISED BID FORM:**
   The "REVISED BID FORM 03-17-2022" is attached to this Addendum. The changes include:
   - Bid Item #48 - 4'H. Wireworks Plus Fence – CIP, has been updated to reflect the revised quantity as part of Revised Sheet SP-1
     - All fencing within the Base Bid is included in this number. This includes fence around Playground Area, Fence around Pickleball, etc.
     - Concrete Fence Band around Pickleball is to be bid in Item #36
   - Bid Item #52 has been added for the 8' Long ADA Picnic Tables. Total 8.
   - Bid Item #53 has been added for the 144 Mexican Feather Grass. This is to include all Planting Bed Preparation, Steel Bed Edging, Mulch, Etc.
   - A-4 Water Fountains – CIP, has been added to the Bid Form.
     - This is to include all materials and installation for the specified product, installation of service line to connection point SW of restroom building. Etc.
     - Service Line to be 1" Diameter and meet all City requirements.

4. **<u>REVISED SHEET ECDP-1</u>:**
   The demolition items have been updated to clarify the following:
   - Additional Tree Demolition in the area of the Detention Area on the east side of the site.
   - Existing Water Line demolition information.

5. **<u>REVISED SHEET SP-1</u>:**
   Sheet SP-1 has been revised to reflect changes to the fence layout. Please replace the original Sheet SP-1 with this revised sheet. Quantities have been modified on the Bid Form.

6. **<u>ADDITION OF SHEET AD-1 PLAYGROUND DRAINAGE</u>:**
   Sheet AD-1 Playground Drainage has been attached to this Addendum #1. This sheet provides the layout and information necessary to complete the playground drainage.

7. **<u>ELECTRICAL CONDUIT AT STRING LIGHT POLES</u>:**
   Conduit can be attached to outside of pole. Conduit and all attaching brackets must match pole color.

8. **RESTROOM BUILDING UTILITY CONNECTIONS:**
Contractor will reconnect to the existing service lines just outside the proposed building, as noted by MEP on Sheet MP-200. This lists line sizes.

9. **WATER FOUNTAINS:**
Contractor is to disregard any information related to the two (2) water fountains shown on the plans. These are being eliminated from the project.will reconnect to the existing service lines just outside the proposed building, as noted by MEP on Sheet MP-200. This lists line sizes.

10. **RESTROOM BUILDING FIXTURE CLARIFICATIONS:**
    - Toilet is floor mounted overhead braced (Series 400)
    - All components of toilet partitions are to be stainless steel.

11. **ELECTRICAL – OG&E LIGHTING CLARIFICATIONS:**
    - OG&E will provide everything required to accomplish OG&E provided lighting. That includes concrete bases as well. Conduit was not included in the wording of the note because the representative for OG&E we were working with mentioned the wiring between light poles would likely be direct bury.
    - OG&E at time of drawings has not completed an internal design of the lighting for the parking lot and the trail around edge of property. They will decide the source location at that time and provide everything necessary to connect lighting to utility power. Contractor shall coordinate with the City of Shawnee and OG&E to make sure timing of installation is understood and accounted for in construction schedule.

12. **PRE-ENGINEERED METAL BUILDING – LARGE PAVILION:**
The following information is being provided for clarification on bidding the Large Pavilion:
    - The foundation system is a delegated design component of the pre-engineered metal building scope of work. This is covered in the PEMB specifications as follows:
        - 1.2_A6._6 - Delegated Design for the slab and foundation system for the Metal Building System.
            - Slab and Foundation design shall be in accordance with the Geotechnical Report
        - 1.5_E_E - Delegated-Design Submittal: Provide complete metal building systems complying with industry standard performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
            - Provide delegated design submittal for all slab and foundation design in accordance with the requirements of the Geotechnical Report.
        - The Concrete under the structure is included in Bid Item #17. The only concrete that will need to be accounted for in this item, would be the footings.

13. **DETAIL 7 ON SHEET D-1:**
Contractor is to disregard the heights listed below the detail.
    - Poured In Place Fall Height is to correspond to playground equipment in that area and required safety surfacing per playground safety standards.
    - Slide exit heights are to meet all playground safety standards and do not have to be exactly 9".

14. **SYNTHETIC TURF:**
All Synthetic Turf within fall zone areas is to have proper base materials to account for fall heights in those areas. All synthetic turf outside of fall zones and on turf berms, is to have a ¾" or 5/8" pad, recommended for turf installations on playgrounds, installed prior to turf.

15. SYNTHETIC TURF:

The following information is being provided for clarification on bidding the synthetic turf:

- All turf is included in the numbers provided in the bid form. This includes the fitness challenge area and 40 yard dash.
- All striping, labels, etc. are to be included in the turf bid. This includes the 40 yard dash area. Also included in the fitness challenge area will be an 18"x36 "START" icon, and an 18"x36" "STOP" icon.

16. PLAYGROND TUNNEL CLARIFICATIONS:

The following information is being provided for clarification on bidding the tunnels:

a. The exposed tunnel is to be stainless steel.
    i. This tunnel will include two (2) 24" diameter holes. One at each end on opposite sides. These will be located on the side of the tunnel roughly 8" above finished grade. There will be 50 3" diameter holes provided throughout the tunnel. All hole locations will be finalized during the submittal process.
b. The two (2) tunnels that are recessed into the berms will be made out of a prefabricated plastic playground material. The tunnel on the north side of th site will be 11' Long at the bottom side. The tunnel on the south side will be 8' Long on the bottom side. These will need to match berm widths on site, and modified as necessary to match the face of the berm.
c. There will be no Poured In Place Rubber material inside of tunnels. Tunnels are to be set at grade of adjacent rubber or turf.

17. PRE-ENGINEERED METAL BUILDING EQUAL:

The following company listed below is approved as an equal material to be utilized as the Pre-Engineered Metal Building for the project.

18. Manufacturer must meet all elements of the originally specified product. This includes but is not limited to drawings, specifications, design intent, materials, finish, construction, warranty, etc.

1. **AMERICAN BUILDING COMANY**
   Submitted By:
   Lambert Construction
   Stephen Mitchell
   405-372-1444
   Stephen@lambertconstructionco.com

19. PLAYGROUND ELEMENTS:

a. The following company listed below is approved as an equal to supply the playground elements.
b. The approval is based on the attached design concept.
c. Arch Swings will be used in lieu of the ones shown in the rendering.
d. See attached renderings

1. **LSI PLAYGROUNDS**
   Local Contact:
   ACS Playgrounds
   Bryan Montgomery
   405-406-9670
   bryanm@acsplay.com

20. SITE FURNISHINGS:

a. The following company listed below is approved as an equal to supply the site furnishings including standard benches, picnic tables, ADA picnic tables, and trash receptacles, etc.
b. The company must meet all elements of the originally specified product. This includes but is not limited to design intent, materials, finish, construction, warranty, etc.

1. **DUMOR**
   Local Contact:
   ACS Playgrounds
   Bryan Montgomery
   405-406-9670
   bryanm@acsplay.com

21. SHADE STRUCTURES:

a. The following companies listed below are approved as an equal to supply the shade structures for the project.
b. The company must meet all elements of the originally specified product. This includes but is not limited to design intent, materials, connections, height, construction, warranty, etc.
c. If or equal product is used during construction, Contractor is to provide all necessary coordination between shade structure manufacturer, structural engineer, electrical engineer, and architect, to ensure all elements are compatible.

2. **SKYWAYS (LANDSCAPE STRUCTURES)**
   Local Contact:
   ACS Playgrounds
   Bryan Montgomery
   405-406-9670
   bryanm@acsplay.com

3. **SHADE SYSTEM INC**
   Local Contact:
   Josh Walk
   800-609-6066
   josh@shadesystemsinc.com

2. **USA SHADE**
   Local Contact:
   Happy Playgrounds
   Kelli Collins
   918-851-9518
   kelli.collins@happyplaygrounds.com

22. POURED IN PLACE RUBBER SURFACING APPROVED EQUALS:

The following companies listed below are approved as an equal material to be utilized as the Poured In Place Rubber Surfacing for the project.

23. Manufacturer must meet all elements of the originally specified product. This includes but is not limited to design intent, materials, finish, colors, construction, warranty, etc.

1. **NO FAULT SAFETY SURFACE**
   Local Contact:
   Happy Playgrounds
   Kelli Collins
   918-851-9518
   kelli.collins@happyplaygrounds.com

2. **ROSEHILL SPORTS AND PLAY SURFACING**
   Local Contact:
   ACS Playgrounds
   Bryan Montgomery
   405-406-9670
   bryanm@acsplay.com

24. SYNTHETIC TURF APPROVED EQUALS:
The following company listed below is approved as an equal material to be utilized as the Synthetic Turf for the project.

a. Manufacturer must meet all elements of the originally specified product. This includes but is not limited to design intent, materials, finish, construction, warranty, etc.
b. Contractor is to be able to supply specified padding and any other associated items.

1. **SOUTHWEST GREENS BOLT 50**
   Local Contact:
   Southwest Greens of Oklahoma
   Richard Shepler
   918-852-06202
   Richardsphone2014@gmail.com

2. **TURFSCAPE HIGHLAND**
   Local Contact:
   ACS Playgrounds
   Bryan Montgomery
   405-406-9670
   bryanm@acsplay.com

25. TURF BERM CONSTRUCTION:

The following company listed below is approved as an equal material to be utilized as the Synthetic Turf Berm Construction Method for the project.

a. Manufacturer must meet all elements of the originally specified product. This includes but is not limited to design intent, materials, finish, construction, warranty, playground safety standards, etc.
b. Contractor is to be able to supply specified padding and any other associated items.
c. This method of construction is acceptable for all berms that fall within playground equipment safety fall zones only.
d. Contractor is to ensure the tunnels, play equipment attached to berm, etc., are all coordinated with the construction of the berm.

1. **PLAYMOUNDS BY FOREVERLAWN**
   Local Contact:
   Foreverlawn
   Ross Spencer
   918-877-8619
   ross@tulsa.foreverlawn.com

Receipt of this Addendum will be confirmed by Planning Design Groups via email read receipt.
This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents advertised on February 21, 2022, in accordance with PROJECT AND BID SPECIFICATIONS and as noted below.
Acknowledge receipt of this Addendum on the Proposal Form.
Failure to do so may subject the Bidder to disqualification.
This Addendum is a one (1) page Addendum.

End of Addendum #1

For the performance of all the work necessary to complete the work under Bid Schedule, as defined in the Contract Documents.

REVISED BID FORM 03-17-2022

BASE BID PAY ITEMS

Item	Description	Unit	Quantity	Amount
1	General Conditions/Bonds/Insurance	LS	1	
	@_____Dollars	($_____)	=	$_____
2	Earthwork-Excavation/Embankment/Compaction/Grading - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
3	Demolition - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
4	Filter Fabric/Silt Fence - CIP	LF	2,000	
	@_____Dollars	($_____)	=	$_____
5	Site Electrical Including Lighting - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
6	Site Water Line Renovations - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
7	Imported Select Fill/Topsoil as Needed - CIP	CY	300	
	@_____Dollars	($_____)	=	$_____
8	Pond Outlet Structure - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
9	Flexamat - CIP	SF	124	
	@_____Dollars	($_____)	=	$_____
10	Parking Lot - Curb and Gutter - CIP	LF	198	
	@_____Dollars	($_____)	=	$_____
11	Parking Lot - S4 Asphalt Paving - CIP	TONS	30	
	@_____Dollars	($_____)	=	$_____
12	Parking Lot - S3 Asphalt Paving - CIP	TONS	49	
	@_____Dollars	($_____)	=	$_____
13	Parking Lot - Tack Coat Application - CIP	GAL	17	
	@_____Dollars	($_____)	=	$_____
14	Parking Lot - ODOT Type A - CIP	CY	87	
	@_____Dollars	($_____)	=	$_____
15	Parking Lot - Striping - CIP	LF	320	
	@_____Dollars	($_____)	=	$_____
16	4" Thick Concrete Pavement - CIP	SF	23,580	
	@_____Dollars	($_____)	=	$_____
17	4" Thick Concrete Pavement (Perimeter Trail) - CIP	SF	8,927	
	@_____Dollars	($_____)	=	$_____
18	Rubberized Safety Surface w/ Concrete Base-CIP	SF	12,170	
	@_____Dollars	($_____)	=	$_____
19	Synthetic Turf (flat) - CIP	SF	13,315	
	@_____Dollars	($_____)	=	$_____
20	Synthetic Turf (berm) - CIP	SF	4,735	
	@_____Dollars	($_____)	=	$_____
21	12' X 12' Shade Structure - CIP	EA	5	
	@_____Dollars	($_____)	=	$_____
22	16' X 16' Shade Structure - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____

Item	Description	Unit	Quantity	Amount
23	Architectural Pavilion - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
24	Restroom Building - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
25	Cantilevered Shade Structure - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
26	Large T Type frame Fabric Stucture - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
27	Playground Equipment with Installation - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
28	Playground Drainage - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
29	Pickleball Court (2 Total) - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____
30	Multi-Use Court 60'x94' - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
31	Basketball Goal - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____
32	Horseshoe Court - CIP (with Synthetic Turf)	EA	2	
	@_____Dollars	($_____)	=	$_____
33	Outdoor Metal Ping Pong Table - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____
34	Stainless Steel Cornhole Boards - CIP (Per Set)	EA	2	
	@_____Dollars	($_____)	=	$_____
35	Jumbo Size Chess/Checker Board - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
36	1'W. Concrete Curb (For Pickleball Fence) - CIP	LF	234	
	@_____Dollars	($_____)	=	$_____
37	6"W. Concrete Curb - CIP	LF	825	
	@_____Dollars	($_____)	=	$_____
38	Lounge Chairs - CIP	EA	12	
	@_____Dollars	($_____)	=	$_____
39	Square Picnic Tables - CIP	EA	11	
	@_____Dollars	($_____)	=	$_____
40	ADA Sq. Picnic Tables - CIP	EA	7	
	@_____Dollars	($_____)	=	$_____
41	Benches - CIP	EA	15	
	@_____Dollars	($_____)	=	$_____
42	Landscape Stone - CIP	EA	22	
	@_____Dollars	($_____)	=	$_____
43	12' X 12' Fabric Umbrella - CIP	EA	9	
	@_____Dollars	($_____)	=	$_____
44	Trash Receptacles - CIP	EA	10	
	@_____Dollars	($_____)	=	$_____
45	Outdoor Grill - CIP	EA	6	
	@_____Dollars	($_____)	=	$_____

Item	Description	Unit	Quantity	Amount
46	Jumbo Size Park Signage - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
47	Rules Signage - CIP	EA	1	
	@_____Dollars	($_____)	=	$_____
48	4'H. Wireworks Plus Fence - CIP	LF	1,425	
	@_____Dollars	($_____)	=	$_____
49	Trees - CIP	EA	72	
	@_____Dollars	($_____)	=	$_____
50	U-3 Bermuda Solid Sod - CIP	SF	60,000	
	@_____Dollars	($_____)	=	$_____
51	Construction Allowance	LS	1	
	@_____Dollars	**($ 75,000.00)**	=	**$ 75,000.00**
52	8' Long ADA Picnic Tables - CIP	EA	8	
	@_____Dollars	($_____)	=	$_____
53	Mexican Feather Grass - CIP (Includes Bed Prep, Mulch, Steel Edging, Etc.)	EA	144	
	@_____Dollars	($_____)	=	$_____

TOTAL BASE BID ITEMS_____Dollars ($_____)

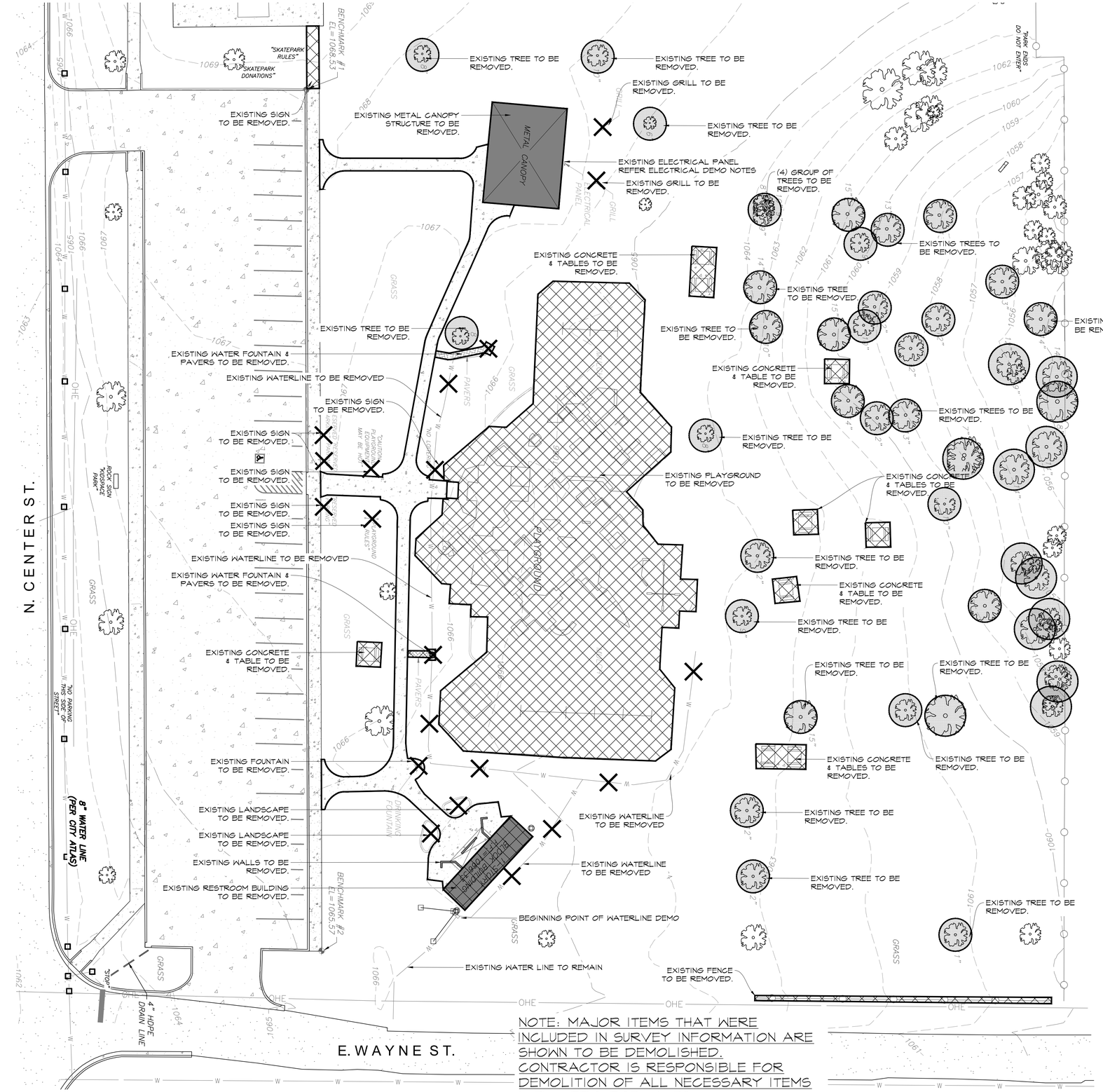
BASE BID PAY ITEMS

Item	Description	Unit	Quantity	Amount
A-1a	Demo and Removal of Existing Fencing - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
A-1b	5' HT Chain Link Fence - CIP	LF	1,167	
	@_____Dollars	($_____)	=	$_____
A-2	Basketball Sports Lighting - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
A-3	Pickleball Sports Lighting - CIP	LS	1	
	@_____Dollars	($_____)	=	$_____
A-4	Water Fountains w/ Service Line from Meter Location - CIP	EA	2	
	@_____Dollars	($_____)	=	$_____

TOTAL ALTERNATE BID ITEMS_____Dollars ($_____)

TOTAL BASE & ALTERNATE BID_____Dollars ($_____)

CIP = COMPLETE IN PLACE



1 EXISTING CONDITIONS & DEMO - PLAN VIEW
SCALE:1"=20'-0"

NOTE: MAJOR ITEMS THAT WERE INCLUDED IN SURVEY INFORMATION ARE SHOWN TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF ALL NECESSARY ITEMS WITHIN PROJECT LIMITS.

DEMOLITION/CLEARING LEGEND

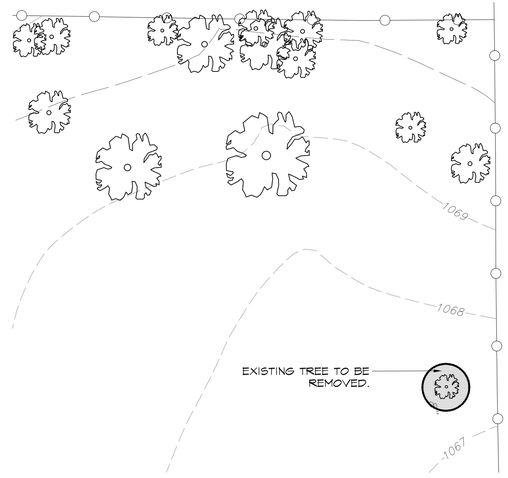
- GENERAL DEMOLITION
- TREE CLEARING
- SITE FURNISHING DEMOLITION

DEMOLITION/CLEARING NOTES

1. CONTRACTOR IS TO COORDINATE W/ OWNER AND ARCHITECT PRIOR TO DEMOLITION TO DETERMINE WHICH ITEMS THE OWNER WISHES TO RETAIN AND THE LOCATION THESE ITEMS ARE TO BE DELIVERED TO.
2. CONTRACTOR TO CONDUCT A THOROUGH REVIEW OF PROPERTY TO VERIFY ALL ITEMS SHOWN TO BE DEMOLISHED ON THIS SHEET.
3. ALL TREES, VEGETATION, TRASH, DEBRIS, CONCRETE, ASPHALT, METAL ITEMS, BLEACHERS AND ALL OTHER MATERIAL ON THIS PROJECT TO BE PROPERLY DEMOLISHED AND REMOVED FROM THIS SITE BY CONTRACTOR AS PER SPECIFICATIONS.
4. ALL EXISTING ITEMS THAT ARE TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION ARE TO BE RESTORED TO ORIGINAL CONDITIONS. THIS INCLUDES BUT IS NOT LIMITED TO LIGHTS, SIDEWALKS, ASPHALT PAVING, BUILDINGS, CURB & GUTTER, ETC.
5. ALL ITEMS WILL BE COMPLETELY REMOVED FROM SITE UNLESS OTHERWISE DIRECTED, NO ITEMS ARE TO BE DEMOLISHED AND LEFT BELOW GRADE.

ELECTRICAL DEMOLITION NOTES

1. ALL EXISTING ELECTRICAL WITHIN THE SITE BOUNDARY TO BE DEMOLISHED PER THE FOLLOWING INTENT.
2. ELECTRIC UTILITY PROVIDER (OG&E) TO DISCONNECT AND REMOVE ALL ELECTRICAL WIRING FROM ELECTRIC METER BACK TO SOURCE.
   EXISTING POLE MOUNTED SITE LIGHTING AT KIDS SPACE PARK IS THE PROPERTY OF OG&E. EXISTING SITE LIGHTING WILL NO LONGER BE UTILIZED AS PART OF NEW DESIGN. CONTRACTOR TO COORDINATE WITH UTILITY TO HAVE REMOVED. CONTRACTOR MAY CHOOSE TO UTILIZE SOME OF THE INSTALLED LIGHTING AS SECURITY LIGHTING UNTIL SUCH TIME IT IS REPLACED WITH NEW.
4. ALL REMAINING ELECTRICAL WIRING AND EQUIPMENT WHICH IS NOT THE PROPERTY OF OG&E SHALL BE DEMOLISHED BY CONTRACTOR. UNDERGROUND ELECTRIC SHALL BE MADE SAFE AND ABANDONED IN PLACE. ALL ABANDONED ELECTRICAL ENCOUNTERED DURING RE-GRADING OR EXCAVATION OF THE SITE SHALL BE DEMOLISHED.



2 EXISTING CONDITIONS & DEMO - NORTHEAST AREA
SCALE:1"=20'-0"

DUTY OF COOPERATION

P.D.G., INC. dba PLANNING DESIGN GROUP IN THIS STATEMENT SHALL BE KNOWN AS 'ARCHITECT'. RELEASE OF THESE PLANS CONTEMPLATES FURTHER COOPERATION AMONG THE OWNER, HIS CONTRACTOR, AND THE ARCHITECT. DESIGN AND CONSTRUCTION ARE COMPLEX. ALTHOUGH THE ARCHITECT AND HIS CONSULTANTS HAVE PERFORMED THEIR SERVICES WITH DUE CARE AND DILIGENCE, THEY CANNOT GUARANTEE PERFECTION. COMMUNICATION IS IMPERFECT AND EVERY CONTINGENCY CANNOT BE ANTICIPATED. ANY AMBIGUITY OR DISCREPANCY DISCOVERED BY THE USE OF THESE PLANS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT. FAILURE TO NOTIFY THE ARCHITECT COMPOUNDS MISUNDERSTANDING AND INCREASES CONSTRUCTION COSTS. A FAILURE TO COOPERATE BY SIMPLE NOTICE TO THE ARCHITECT SHALL RELIEVE THE ARCHITECT FROM RESPONSIBILITY FOR ALL CONSEQUENCES. CHANGES MADE FROM THE PLANS WITHOUT CONSENT OF THE ARCHITECT ARE UNAUTHORIZED AND SHALL RELIEVE THE ARCHITECT OF RESPONSIBILITY FOR ALL CONSEQUENCES ARISING OUT OF SUCH CHANGES.

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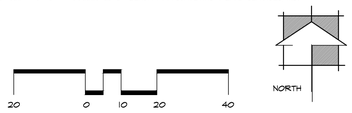
BASE INFORMATION

ALL BASE INFORMATION INCLUDING EXISTING DRAINAGE WAYS, EXISTING CONTOURS, EXISTING VEGETATION, EXISTING STRUCTURES AND STREETS WERE PROVIDED TO PLANNING DESIGN GROUP BASED FROM DATA COLLECTED BY BENCHMARK SURVEYING & LAND SERVICES, INC.



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LANDSCAPE ARCHITECTURE • RECREATIONAL DESIGN • LAND PLANNING
5314 S. YALE AVE., SUITE 510, TULSA, OK 74135
918.628.1255 918.628.1256 FAX
WWW.PLANNINGDESIGNGROUP.COM

03-17-22
WESTERN LANDSCAPE ARCHITECT JAMES C. CROSBY 121 OKLAHOMA

JAMES C. CROSBY, ASLA
LANDSCAPE ARCHITECT OF RECORD

PROJECT INFORMATION

PROJECT ADDRESS:	
S. CENTER ST. SHAWNEE, OKLAHOMA 74801	
PROJECT NO.	N/A
DATE	02/21/22
DRAWN BY	CHECKED BY
MC	GE

KIDS SPACE PARK SHAWNEE, OKLAHOMA DEMOLITION PLAN

ISSUE/ REVISIONS

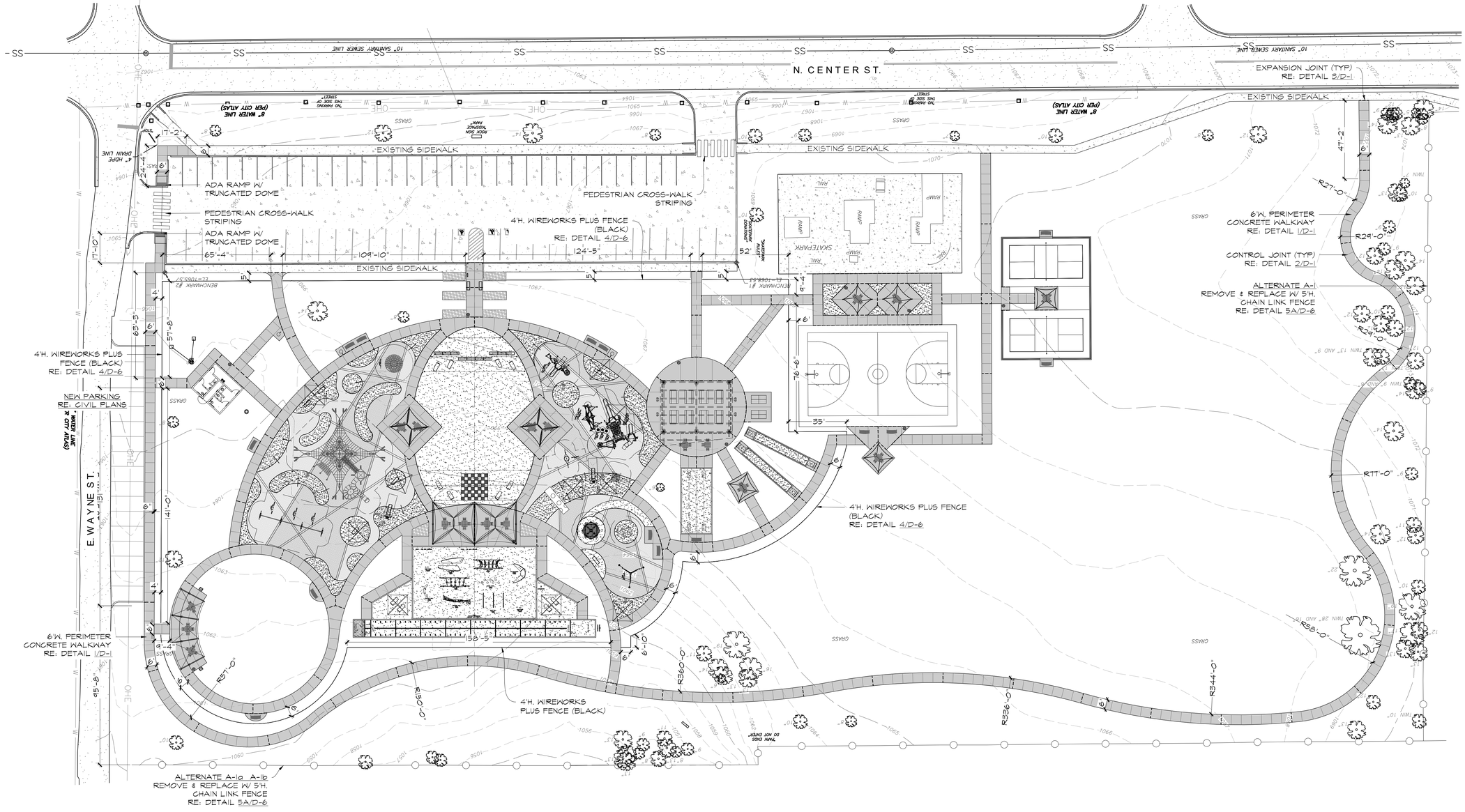
02/21/22	FINAL ISSUED SET
03/17/22	REVISED SHEET

OWNER:

CITY OF SHAWNEE
City Hall
16 West 9th St.
Shawnee, OK 74801
OFFICE: (405) 878-1760

ECDP-1

EXISTING CONDITIONS & DEMO PLAN



1 PERIMETER TRAIL SITE PLAN - PLAN VIEW

SCALE:1"=30'-0"

EXPANSION & CONTROL JOINT NOTE

1. CONTRACTOR SHALL MOCK UP A CONTROL & EXPANSION JOINT LAYOUT PATTERN AND SUBMIT IT FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION FOR APPROVAL.

LAYOUT NOTES

1. ALL DIMENSIONS GIVEN ARE HORIZONTAL

2. LANDSCAPE ARCHITECT TO APPROVE FINAL LAYOUT OF WALL FEATURES.

3. CONTRACTOR TO GAIN APPROVAL OF OWNER OR LANDSCAPE ARCHITECT BEFORE ANY DIGGING TAKES PLACE.

4. REFER TO PROJECT DETAILS FOR SPECIFICATIONS, MATERIALS, AND CONSTRUCTION DETAILS.

5. ASSUME ALL DIMENSIONS TO BE GIVEN AT RIGHT ANGLES UNLESS OTHERWISE NOTED ON PLAN.

6. SURVEYOR TO CALCULATE COORDINATES AND STAKE THE LAYOUT OF WALLS AND COLUMNS FOR SUB-CONTRACTOR.

DUTY OF COOPERATION

P.D.G., INC. dba PLANNING DESIGN GROUP IN THIS STATEMENT SHALL BE KNOWN AS 'ARCHITECT'. RELEASE OF THESE PLANS CONTEMPLATES FURTHER COOPERATION AMONG THE OWNER, HIS CONTRACTOR, AND THE ARCHITECT. DESIGN AND CONSTRUCTION ARE COMPLEX. ALTHOUGH THE ARCHITECT AND HIS CONSULTANTS HAVE PERFORMED THEIR SERVICES WITH DUE CARE AND DILIGENCE, THEY CANNOT GUARANTEE PERFECTION. COMMUNICATION IS IMPERFECT AND EVERY CONTINGENCY CANNOT BE ANTICIPATED. ANY AMBIGUITY OR DISCREPANCY DISCOVERED BY THE USE OF THESE PLANS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT. FAILURE TO NOTIFY THE ARCHITECT COMPOUNDS MISUNDERSTANDING AND INCREASES CONSTRUCTION COSTS. A FAILURE TO COOPERATE BY SIMPLE NOTICE TO THE ARCHITECT SHALL RELIEVE THE ARCHITECT FROM RESPONSIBILITY FOR ALL CONSEQUENCES. CHANGES MADE FROM THE PLANS WITHOUT CONSENT OF THE ARCHITECT ARE UNAUTHORIZED, AND SHALL RELIEVE THE ARCHITECT OF RESPONSIBILITY FOR ALL CONSEQUENCES ARRIVING OUT OF SUCH CHANGES.

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BASE INFORMATION

ALL BASE INFORMATION INCLUDING EXISTING DRAINAGE WAYS, EXISTING CONTOURS, EXISTING VEGETATION, EXISTING STRUCTURES AND STREETS WERE PROVIDED TO PLANNING DESIGN GROUP BASED FROM DATA COLLECTED BY BENCHMARK SURVEYING & LAND SERVICES, INC.

30 0 15 30 60

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918.628.1255 918.628.1256 FAX
WWW.PLANNINGDESIGNGROUP.COM

03-17-22

JAMES C. CROSBY, ASLA
LANDSCAPE ARCHITECT OF RECORD

PROJECT INFORMATION

PROJECT ADDRESS:

S. CENTER ST.
SHAWNEE, OKLAHOMA 74801

PROJECT NO.	N/A
DATE	02/21/22
DRAWN BY	CHECKED BY
MC	GE

KIDS SPACE PARK
SHAWNEE, OKLAHOMA
PERIMETER TRAIL SITE PLAN

ISSUE/ REVISIONS

02/21/22	FINAL ISSUED SET
03/17/22	REVISED SHEET

OWNER:

CITY OF SHAWNEE
City Hall
16 West 9th St.
Shawnee, OK 74801
OFFICE: (405) 878-1760

SP-1

PERIMETER TRAIL SITE PLAN

N. CENTER ST.

E. WAYNE ST.

EZ-FRENCH DRAIN (CONTRACTOR IS TO AVOID PLAY EQUIPMENT DURING LAYOUT) RE: PRODUCT INFO.

EZ-FRENCH DRAIN (CONTRACTOR IS TO AVOID PLAY EQUIPMENT DURING LAYOUT) RE: PRODUCT INFO.

EZ-FRENCH DRAIN (CONTRACTOR IS TO AVOID PLAY EQUIPMENT DURING LAYOUT) RE: PRODUCT INFO.

FLUSH MOUNTED CLEAN OUT

SOLID DRAIN LINE TO DETENTION AREA

CONCRETE PRECAST END SECTION. DAYLIGHT IN DETENTION AREA

8" WATER LINE (PER CITY ATLAS)

4" HDPE DRAIN LINE

"NO PARKING THIS SIDE OF STREET"

ROCK SION "KIDSPACE PARK"

"SKATEPARK RULES"

"SKATEPARK DOMINOS"

SKATEPARK

RAMP

RAIL

BENCHMARK #1 EL=1068.53

BENCHMARK #2 EL=1065.37

PARK ENDS DO NOT ENTER

PLAYGROUND DRAINAGE LEGEND

- 6" ADS N-12 PIPE 530 LF
- EZ-FRENCH DRAIN 100 LF

*ALL ITEMS TO BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

PRODUCT INFORMATION

FRENCH DRAIN
-NDS EZ-DRAIN FRENCH DRAIN OR APPROVED EQUAL

NDS PRO OR APPROVED EQUAL
851 N HARVARD AVE
LINDSAY, CA 93247-1714
PHONE: 1-800-726-1994
WEB: WWW.NDSPRO.COM
LOCAL CONTACT: WATERSTORE

GRADING NOTES

1. CONTRACTOR TO BLEND CONTOUR ALTERATIONS INTO EXISTING TOPOGRAPHY TO PROMOTE A SMOOTH TRANSITION.
2. CONTRACTOR TO MAINTAIN AND UTILIZE NATURAL DRAINAGE PATTERNS WHERE POSSIBLE.
3. ALL SPOT ELEVATIONS HAVE BEEN TRUNCATED TO EXCLUDE THE "12" (THOUSAND/HUNDREDS) FROM THE LABEL.
4. ALL IMPERVIOUS WALKING SURFACES SHALL NOT EXCEED 2% CROSS SLOPE AND 5% SLOPE IN WALKING DIRECTION. ALL PLAZA AREAS TO MAINTAIN A MAXIMUM OF 2% SLOPE IN ANY DIRECTION. ALL GRADES MUST MEET CURRENT CITY ACCESSIBILITY CODES AND REQUIREMENTS.
5. IF ERRORS ARE DISCOVERED IN REGARDS TO PROPOSED SPOT ELEVATIONS OR CONTOURS ON THE PLAN, THE CONTRACTOR IS TO CONSULT WITH LANDSCAPE ARCHITECT PRIOR TO CONTINUING CONSTRUCTION OPERATIONS.
6. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SIDEWALKS AND ACCESS RAMPS COMPLY WITH THE CITY ACCESSIBILITY STANDARD REQUIREMENTS. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN DESIGN INFORMATION AND THE CITY STANDARD REQUIREMENTS PRIOR TO CONSTRUCTION.

DUTY OF COOPERATION

P.D.G., INC. dba PLANNING DESIGN GROUP IN THIS STATEMENT SHALL BE KNOWN AS 'ARCHITECT'. RELEASE OF THESE PLANS CONTEMPLATES FURTHER COOPERATION AMONG THE OWNER, HIS CONTRACTOR, AND THE ARCHITECT. DESIGN AND CONSTRUCTION ARE COMPLEX. ALTHOUGH THE ARCHITECT AND HIS CONSULTANTS HAVE PERFORMED THEIR SERVICES WITH DUE CARE AND DILIGENCE, THEY CANNOT GUARANTEE PERFECTION. COMMUNICATION IS IMPERFECT AND EVERY CONTINGENCY CANNOT BE ANTICIPATED. ANY AMBIGUITY OR DISCREPANCY DISCOVERED BY THE USE OF THESE PLANS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT. FAILURE TO NOTIFY THE ARCHITECT COMPOUNDS MISUNDERSTANDING AND INCREASES CONSTRUCTION COSTS. A FAILURE TO COOPERATE BY SIMPLE NOTICE TO THE ARCHITECT SHALL RELIEVE THE ARCHITECT FROM RESPONSIBILITY FOR ALL CONSEQUENCES. CHANGES MADE FROM THE PLANS WITHOUT CONSENT OF THE ARCHITECT ARE UNAUTHORIZED AND SHALL RELIEVE THE ARCHITECT OF RESPONSIBILITY FOR ALL CONSEQUENCES ARRIVING OUT OF SUCH CHANGES.

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BASE INFORMATION

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BEFORE YOU DIG... CALL OKIE 1-800-522-6543

20 0 10 20 40

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918.628.1255 918.628.1256 FAX
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03-17-22

REGISTERED LANDSCAPE ARCHITECT JAMES C. CROSBY 121 OKLAHOMA

JAMES C. CROSBY, ASLA
LANDSCAPE ARCHITECT OF RECORD

PROJECT INFORMATION

PROJECT ADDRESS:

S. CENTER ST.
SHAWNEE, OKLAHOMA 74801

PROJECT NO.	N/A
DATE	02/21/22
DRAWN BY	CHECKED BY
MC	GE

KIDS SPACE PARK SHAWNEE, OKLAHOMA

ISSUE/ REVISIONS

02/21/22	FINAL ISSUED SET
03/17/22	ADDENDUM #1

OWNER:

CITY OF SHAWNEE
City Hall
16 West 9th St.
Shawnee, OK 74801
OFFICE: (405) 878-1760

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ADDENDUM #1
PLAYGROUND DRAINAGE

landscape structures

Shawnee Kids Space

1162554-01-02-01 • 03.15.2022

playground adventures

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landscape structures

Shawnee Kids Space

1162554-01-02-08 • 03.15.2022

acs playground adventures

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Shawnee Kids Space

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playground adventures

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ADDENDUM NUMBER TWO
TO
CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR
KIDS SPACE PARK IMPROVEMENTS

Dated: March 17, 2022

The following changes, clarifications and/or additions are hereby made a part of the contract documents for the construction of this project, as fully and completely as if the same were originally included therein, and shall supersede anything contained in the plans and specifications with which it might conflict.

1. **PROJECT ADDRESS:**
   Ignore Address in Addendum #1. This The project is located at N. Center Ave. and E. Wayne St., in Shawnee, OK.

2. **PLAYGROUND ELEMENTS:**
   a. The approved equal, LSI Playgrounds, is approved for all play pieces except the Challenge Course and the 40 Yard Dash Timing System.

Receipt of this Addendum will be confirmed by Planning Design Groups via email read receipt.
This Addendum forms a part of the Contract Documents and modifies the original
Bidding Documents advertised on February 21, 2022, in accordance with
PROJECT AND BID SPECIFICATIONS and as noted below.
Acknowledge receipt of this Addendum on the Proposal Form.
Failure to do so may subject the Bidder to disqualification.
This Addendum is a one (1) page Addendum.

End of Addendum #2

Kid's Space Park - Bid Tabulation

City of Shawnee

DATE: March 22, 2022

BASE BID ITEMS				ARCHITECT		BRUCE JOHNSON		LAMBERT		SHILOH		RUDY		DOWNEY		WYNN	
Item	Description	Unit	Qty	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost
1	General Conditions/Bonds/Insurance	LS	1	330,000.00	$330,000.00	111,000.00	$564,689.77	193,970.57	$193,970.57	164,129.00	$164,129.00	150,000.00	$150,000.00	194,000.00	$194,000.00	356,000.00	$356,000.00
2	Earthwork-Excavation/Embankment/Compaction/Grading - CIP	LS	1	100,000.00	$100,000.00	28,000.00	$28,000.00	34,946.34	$34,946.34	72,000.00	$72,000.00	250,000.00	$250,000.00	62,000.00	$62,000.00	74,000.00	$74,000.00
3	Demolition	LS	1	85,000.00	$85,000.00	50,000.00	$50,000.00	13,025.45	$13,025.45	20,100.00	$20,100.00	45,000.00	$45,000.00	14,000.00	$14,000.00	18,000.00	$18,000.00
4	Filter Fabric/Silt Fence - CIP	LF	2,000	5.00	$10,000.00	1.50	$3,000.00	4.23	$8,460.00	2.75	$5,500.00	1.75	$3,500.00	2.00	$4,000.00	5.00	$10,000.00
5	Site Electrical Including Lighting - CIP	LS	1	175,000.00	$175,000.00	121,450.00	$121,450.00	121,782.70	$102,721.00	101,900.00	$101,900.00	120,000.00	$120,000.00	124,000.00	$124,000.00	115,000.00	$115,000.00
6	Site Water Line Renovations - CIP	LS	1	10,000.00	$10,000.00	25,000.00	$25,000.00	1,164.88	$1,164.88	0.00	$0.00	12,000.00	$12,000.00	7,000.00	$7,000.00	18,000.00	$18,000.00
7	Imported Select Fill/Topsoil as Needed - CIP	CY	300	50.00	$15,000.00	12.00	$3,600.00	31.77	$9,531.00	17.50	$5,250.00	30.00	$9,000.00	25.00	$7,500.00	21.00	$6,300.00
8	Pond Outlet Structure - CIP	LS	1	35,000.00	$35,000.00	20,000.00	$20,000.00	12,707.76	$14,296.00	9,800.00	$9,800.00	12,000.00	$12,000.00	10,000.00	$10,000.00	12,000.00	$12,000.00
9	Flexamat - CIP	SF	124	55.00	$6,820.00	20.00	$2,480.00	37.58	$4,659.92	22.58	$2,799.92	23.00	$2,852.00	9.00	$1,116.00	12.00	$1,488.00
10	Parking Lot - Curb and Gutter - CIP	LF	198	30.00	$5,940.00	111.11	$21,999.78	28.88	$5,718.24	23.74	$4,700.52	30.00	$5,940.00	35.00	$6,930.00	35.00	$6,930.00
11	Parking Lot - S4 Asphalt Paving - CIP	TONS	30	125.00	$3,750.00	416.67	$12,500.10	0.00	$11,649.00	200.00	$6,000.00	130.00	$3,900.00	242.00	$7,260.00	220.00	$6,600.00
12	Parking Lot - S3 Asphalt Paving - CIP	TONS	49	125.00	$6,125.00	255.10	$12,499.90	0.00	$12,178.00	189.80	$9,300.20	122.00	$5,978.00	269.00	$13,181.00	172.00	$8,428.00
13	Parking Lot - Tack Coat - CIP	GAL	17	350.00	$5,950.00	294.12	$5,000.04	0.00	$2,647.00	129.41	$2,199.97	6.00	$102.00	10.00	$170.00	9.00	$153.00
14	Parking Lot - ODOT Type A - CIP	CY	87	55.00	$4,785.00	57.47	$4,999.89	0.00	$5,242.00	120.00	$10,440.00	85.00	$7,395.00	68.00	$5,916.00	144.00	$12,528.00
15	Parking Lot - Striping - CIP	LF	320	8.00	$2,560.00	4.38	$1,401.60	9.76	$3,123.20	4.00	$1,280.00	2.00	$640.00	5.00	$1,600.00	1.70	$544.00
16	4" Thick Concrete Pavement - CIP	SF	23,580	7.00	$165,060.00	9.46	$223,066.80	0.00	$181,094.00	7.12	$167,889.60	8.00	$188,640.00	9.00	$212,220.00	10.00	$235,800.00
17	4" Thick Concrete Pavement (Perimeter Trail) - CIP	SF	8,927	7.00	$62,489.00	21.28	$189,966.56	0.00	$60,793.00	7.17	$64,006.59	8.00	$71,416.00	9.00	$80,343.00	10.00	$89,270.00
18	Rubberized Safety Surface w/ Concrete Base-CIP	SF	12,170	27.50	$334,675.00	24.65	$299,990.50	25.55	$248,633.00	25.74	$313,255.80	28.00	$340,760.00	30.00	$365,100.00	32.00	$389,440.00
19	Synthetic Turf (flat) - CIP	SF	13,315	17.50	$233,012.50	19.53	$260,041.95	0.00	$168,035.00	18.42	$245,262.30	20.00	$266,300.00	31.00	$412,765.00	23.00	$306,245.00
20	Synthetic Turf (berm) - CIP	SF	4,735	25.00	$118,375.00	15.84	$75,002.40	0.00	$104,454.00	27.31	$129,312.85	29.00	$137,315.00	38.00	$179,930.00	43.00	$203,605.00
21	12' X 12' Shade Structure - CIP	EA	5	7,500.00	$37,500.00	6,497.00	$32,485.00	7,201.06	$30,710.00	5,547.00	$27,735.00	5,825.00	$29,125.00	7,300.00	$36,500.00	6,500.00	$32,500.00
22	16' X 16' Shade Structure - CIP	EA	2	15,000.00	$30,000.00	12,843.00	$25,686.00	18,471.79	$20,438.00	9,650.00	$19,300.00	10,135.00	$20,270.00	10,500.00	$21,000.00	11,500.00	$23,000.00
23	Architectural Pavilion - CIP	EA	1	100,000.00	$100,000.00	50,000.00	$50,000.00	0.00	$111,057.00	109,040.00	$109,040.00	100,000.00	$100,000.00	152,000.00	$152,000.00	105,000.00	$105,000.00
24	Restroom Building - CIP	LS	1	275,000.00	$275,000.00	150,000.00	$150,000.00	0.00	$247,363.00	379,997.00	$379,997.00	200,000.00	$200,000.00	354,000.00	$354,000.00	250,000.00	$250,000.00
25	Cantilevered Shade Structure - CIP	EA	1	45,000.00	$45,000.00	24,885.00	$24,885.00	30,376.84	$30,376.84	46,320.00	$46,320.00	48,635.00	$48,635.00	43,000.00	$43,000.00	35,000.00	$35,000.00
26	Large T Type frame Fabric Stucture - CIP	EA	1	60,000.00	$60,000.00	56,965.00	$56,965.00	65,513.80	$58,546.00	55,284.00	$55,284.00	58,000.00	$58,000.00	59,000.00	$59,000.00	65,000.00	$65,000.00
27	Playground Equipment with Installation - CIP	LS	1	900,000.00	$900,000.00	294,701.00	$294,701.00	1,048,390.20	$1,048,390.20	904,944.00	$904,944.00	950,000.00	$950,000.00	1,015,000.00	$1,015,000.00	1,230,000.00	$1,230,000.00
28	Playground Drainage - CIP	LS	1	15,000.00	$15,000.00	75,000.00	$75,000.00	0.00	$13,768.00	14,000.00	$14,000.00	22,250.00	$22,250.00	17,000.00	$17,000.00	32,000.00	$32,000.00
29	Pickleball Court (2 Total) - CIP	EA	2	40,000.00	$80,000.00	29,700.00	$59,400.00	31,345.81	$62,691.62	29,700.00	$59,400.00	31,185.00	$62,370.00	40,000.00	$80,000.00	35,000.00	$70,000.00
30	Multi-Use Court 60'x94' - CIP	EA	1	75,000.00	$75,000.00	95,425.00	$95,425.00	132,372.50	$132,372.50	126,000.00	$126,000.00	140,000.00	$140,000.00	126,000.00	$126,000.00	149,000.00	$149,000.00
31	Basketball Goal - CIP	EA	2	4,000.00	$8,000.00	4,392.00	$8,784.00	4,235.92	$8,471.84	4,000.00	$8,000.00	5,500.00	$11,000.00	5,400.00	$10,800.00	5,000.00	$10,000.00
32	Horseshoe Court - CIP (Synthetic Turf)	EA	2	15,000.00	$30,000.00	2,500.00	$5,000.00	0.00	$10,537.00	1,600.00	$3,200.00	5,500.00	$11,000.00	9,700.00	$19,400.00	5,500.00	$11,000.00
33	Outdoor Metal Ping Pong Table - CIP	EA	2	10,000.00	$20,000.00	7,284.00	$14,568.00	6,353.88	$12,707.76	6,250.00	$12,500.00	8,500.00	$17,000.00	8,400.00	$16,800.00	8,000.00	$16,000.00
34	Stainless Steel Cornhole Boards - CIP (Per Set)	EA	2	2,500.00	$5,000.00	1,627.00	$3,254.00	1,377.73	$2,755.46	1,275.00	$2,550.00	2,350.00	$4,700.00	2,300.00	$4,600.00	1,800.00	$3,600.00
35	Jumbo Size Chess/Checker Board - CIP	EA	1	10,000.00	$10,000.00	6,520.00	$6,520.00	11,667.84	$11,667.84	5,500.00	$5,500.00	10,000.00	$10,000.00	6,300.00	$6,300.00	10,400.00	$10,400.00
36	1'W. Concrete Curb (For Pickleball Fence) - CIP	LF	234	20.00	$4,680.00	50.00	$11,700.00	11.77	$3,601.00	19.44	$4,548.96	15.00	$3,510.00	30.00	$7,020.00	43.00	$10,062.00
37	6"W. Concrete Curb - CIP	LF	825	17.50	$14,437.50	35.00	$28,875.00	0.00	$19,066.00	14.20	$11,715.00	10.00	$8,250.00	22.00	$18,150.00	21.00	$17,325.00
38	Lounge Chairs - CIP	EA	12	2,000.00	$24,000.00	1,560.00	$18,720.00	1,367.50	$16,410.00	1,357.50	$16,290.00	17,750.00	$213,000.00	1,300.00	$15,600.00	1,500.00	$18,000.00
39	Square Picnic Tables - CIP	EA	11	3,000.00	$33,000.00	2,045.45	$22,499.95	3,706.43	$36,535.00	3,131.91	$34,451.01	3,290.00	$36,190.00	3,400.00	$37,400.00	3,700.00	$40,700.00
40	ADA Sq. Picnic Tables - CIP	EA	7	3,000.00	$21,000.00	6,285.71	$43,999.97	3,494.63	$24,462.41	2,920.00	$20,440.00	3,065.00	$21,455.00	3,200.00	$22,400.00	3,500.00	$24,500.00
41	Benches - CIP	EA	15	2,000.00	$30,000.00	1,120.00	$16,800.00	1,666.27	$24,994.05	2,737.53	$41,062.95	2,875.00	$43,125.00	3,000.00	$45,000.00	3,300.00	$49,500.00
42	Landscape Stone - CIP	EA	22	1,500.00	$33,000.00	568.18	$12,499.96	909.86	$20,016.92	863.64	$19,000.08	1,000.00	$22,000.00	900.00	$19,800.00	1,100.00	$24,200.00
43	12' X 12' Fabric Umbrella - CIP	EA	9	5,500.00	$49,500.00	7,053.00	$63,477.00	7,436.39	$48,000.00	5,036.44	$45,327.96	5,290.00	$47,610.00	5,400.00	$48,600.00	6,000.00	$54,000.00
44	Trash Receptacles - CIP	EA	10	1,500.00	$15,000.00	3,607.09	$36,070.90	1,374.13	$13,741.30	2,985.00	$29,850.00	3,135.00	$31,350.00	3,200.00	$32,000.00	3,900.00	$39,000.00
45	Outdoor Grill - CIP	EA	6	1,000.00	$6,000.00	656.00	$3,936.00	694.69	$4,168.14	600.00	$3,600.00	700.00	$4,200.00	700.00	$4,200.00	800.00	$4,800.00
46	Jumbo Size Park Signage - CIP	LS	1	100,000.00	$100,000.00	31,550.00	$31,550.00	33,029.59	$33,029.59	14,000.00	$14,000.00	6,000.00	$6,000.00	25,000.00	$25,000.00	12,000.00	$12,000.00
47	Rules Signage - CIP	EA	1	4,000.00	$4,000.00	2,500.00	$2,500.00	1,270.78	$3,812.00	3,600.00	$3,600.00	3,800.00	$3,800.00	4,000.00	$4,000.00	3,000.00	$3,000.00
48	4'H. Wireworks Plus Fence - CIP	LF	1,425	60.00	$85,500.00	37.03	$52,767.75	39.38	$56,116.50	37.18	$52,981.50	40.00	$57,000.00	40.00	$57,000.00	44.00	$62,700.00
49	Trees - CIP	EA	72	600.00	$43,200.00	899.39	$64,756.08	708.94	$51,043.68	666.67	$48,000.24	700.00	$50,400.00	725.00	$52,200.00	900.00	$64,800.00
50	U-3 Bermuda Solid Sod - CIP	SF	60,000	0.40	$24,000.00	0.50	$30,000.00	0.48	$28,800.00	0.29	$17,400.00	0.50	$30,000.00	0.50	$30,000.00	0.60	$36,000.00
51	Construction Allowance	LS	1	75,000.00	$75,000.00	75,000.00	$75,000.00	75,000.00	$75,000.00	75,000.00	$75,000.00	75,000.00	$75,000.00	75,000.00	$75,000.00	75,000.00	$75,000.00
52	8' Long ADA Picnic Tables - CIP	EA	8	3,500.00	$28,000.00	2,740.13	$21,921.04	0.00	$31,210.00	3,680.00	$29,440.00	5,500.00	$44,000.00	4,000.00	$32,000.00	6,300.00	$50,400.00
53	Mexican Feather Grass - CIP (Includes Bed Prep, Mulch, Steel Edging, Etc.)	EA	144	50.00	$7,200.00	159.36	$22,947.84	518.01	$74,593.44	43.75	$6,300.00	44.00	$6,336.00	25.00	$3,600.00	52.00	$7,488.00
TOTAL BASE BID					**$3,997,559.00**		**$3,387,383.78**		**$3,552,794.69**		**$3,581,904.45**		**$4,020,314.00**		**$4,199,401.00**		**$4,506,306.00**

ALTERNATE BID ITEMS																
Item	Description	Unit	Qty	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost
A-1a	Demo and Removal of Existing Fencing - CIP	LS	1	15,000.00	$15,000.00	4,500.00	$4,500.00	3,176.94	$3,176.94	3,200.00	$3,200.00	5,000.00	$5,000.00	500.00	$500.00	6,000.00	$6,000.00
A-1b	5' HT Chain Link Fence - CIP	LF	1,167	55.00	$64,185.00	27.85	$32,500.95	20.26	$23,643.42	20.14	$23,503.38	20.00	$23,340.00	21.00	$24,507.00	22.00	$25,674.00
A-2	Basketball Sports Lighting - CIP	LS	1	50,000.00	$50,000.00	19,000.00	$19,000.00	0.00	$27,909.00	29,000.00	$29,000.00	20,000.00	$20,000.00	20,000.00	$20,000.00	31,000.00	$31,000.00
A-3	Pickleball Sports Lighting - CIP	LS	1	50,000.00	$50,000.00	20,000.00	$20,000.00	0.00	$26,938.00	29,000.00	$29,000.00	21,000.00	$21,000.00	22,000.00	$22,000.00	30,000.00	$30,000.00
A-4	Water Fountains w/ Service Line from Meter Location - CIP	EA	2	5,500.00	$11,000.00	2,250.00	$4,500.00	5,912.29	$11,824.58	9,500.00	$19,000.00	8,250.00	$16,500.00	10,200.00	$20,400.00	12,000.00	$24,000.00
TOTAL ALTERNATE BID ITEMS					**$190,185.00**		**$80,500.95**		**$93,491.94**		**$103,703.38**		**$85,840.00**		**$87,407.00**		**$116,674.00**
TOTAL WITH BASE BID & ALTERNATE BID ITEMS					**$4,187,744.00**		**$3,467,884.73**		**$3,646,286.63**		**$3,685,607.83**		**$4,106,154.00**		**$4,286,808.00**		**$4,622,980.00**

Math Error
Differing Overall Base Bid Totals, Alternate Totals, and Combined Totals
Contractor wrote over Exteneded Cost with Revised Total
Unit Cost was left blank and only Extended Cost was provided
Items filled in with Extended Costs only (Unit Costs were not used in this scenario) - Math is correct and totals are correct from Contractor

This Bid Tabulation Sheet reflects corrected bid prices according to Bidder's Unit Cost Pricing times the estimated quantities listed in the Bid Form. Total numbers may vary from the total cost submitted by the Contractor in their Bid Form.

I, the undersigned, do hereby certify that all bids on this Bid Tabulation Sheet were reviewed and there were no irregularities in the bids not otherwise noted and that said sums are true and correct to the best of my knowledge.

Submitted By:
Geoffery Evans, Planning Design Group

Planning Design Group ● 5314 South Yale Ave., Suite 510 ● Tulsa, Oklahoma 74135 ● 918/628-1255