

BID NOTICE

The Board of Park Commissioners of the Arlington Heights Park District, Arlington Heights, Illinois, invites bids for **Parking Lot Improvements at both Olympic and Lake Arlington**. The scope of work includes: Removal, off site disposal and replacements of asphalt and concrete for two parking lots according to plans and specifications. Sealed proposals will be received at the Arlington Heights Park District office at 410 N. Arlington Heights Road, Arlington Heights, Illinois until:

May 16, 2019 1:00 PM for Olympic Parking Lot

May 16, 2019 2:00 PM for Lake Arlington Parking Lot

Bids will be publicly opened and read aloud at the respective times for each parking lot project.

Bid documents, including Plans and Specifications required for bidding purposes are available by download from the park district website www.ahpd.org. No plan deposit is required to obtain bid documents. There will be a voluntary pre-bid meeting for each parking lot. While this is voluntary, we encourage attendance to clarify any questions before submitting your bid:

May 9, 2019 at 10:00 am Olympic 660 N. Ridge Ave. Arlington Hts.

May 10, 2019 10:00 am Lake Arlington 2201 N. Windsor Dr. Arlington Hts.

All bidders are required to furnish a Bid Bond, Cashier's Check or Certified Check for 10% of the total base bid amount at the time of bidding. **If you are bidding both projects, separate bid bonds/checks are required.** No bids will be withdrawn without the written consent of the Arlington Heights Park District. If a Bid is withdrawn, the Bidder will not be permitted to submit another Bid for the same Project. Only bids in compliance with the provisions of the Bid Documents will be considered. The successful bidder will be required to furnish a satisfactory Performance Bond and Labor and Material Payment Bond for the total contract amount.

This is a Prevailing Wage Schedule project and the contractor and all subcontractors are to pay the prevailing wage for Cook County for the life of the project and are responsible for keeping up with all changes in accordance with the requirements of the Illinois Wages of Employees on Public Works Act (820 ILCS 130/5 with amendments to sections 5, 6, and 11a effective 1/1/2012).

The Board of Park Commissioners of the Arlington Heights Park District reserves the right to reject any or all of the bids on any basis and without disclosure of a reason. The failure to make such a disclosure shall not result in accrual of any right, claim or cause of action by any unsuccessful Bidder against the Arlington Heights Park District. Bids will be considered firm for a period of sixty days (60) days.

By Order Of:
Board of Park Commissioners
Arlington Heights Park District

Published: May 3, 2019 – Daily Herald Newspaper

C. PROJECT IDENTIFICATION AND LOCATION

1. Project Identification: **Lake Arlington Parking Lot Improvements**

Project Location: **Lake Arlington
2201 N. Windsor Dr.
Arlington Heights, IL 60004**

2. Project Contact: Ben Rea
Director of Parks and Planning
brea@ahpd.org
847-506-7145

D. RECEIPT AND OPENING OF BIDS

1. All bids are due no later **May 16, 2019 at 2:00 PM**, at 410 N. Arlington Heights Rd., Arlington Heights, IL 60004.
2. The Park District reserves the right to reject any or all bids and to waive any formality or technicality in any Proposal in the interest of the Park District.
3. Any bid received after specified bid opening time will not be considered.
4. Contractor is required to hold total bid price for sixty days (60) calendar days after bid opening.

E. PREPARATION OF BIDS

1. Each bid shall be submitted on the Bid Form furnished in these documents. The bidder shall specify in figures, in the places provided, a price for each of the separate items called for in the proposal forms.
2. All bids must be written in black ink or typewritten, and signed with the legal signature of the Bidder, and enclosed in an opaque envelope, sealed, and clearly addressed as follows:

**SEALED BID: Lake Arlington Parking Lot Improvements
Attn: Bid Dept.**

The envelope shall also contain the name and address of the bidder. The Park District will not be responsible for premature opened envelopes that are not properly marked.

F. EXAMINATION

1. Each bidder shall first examine the site(s), taking into consideration all such conditions that may affect this work. A submission of a proposal implies that this examination has been made. If the bid is accepted, the Bidder will be responsible for all errors in its bid resulting from its failure or neglect to comply with these instructions. The Arlington Heights Park District will not, in any case, be responsible for any change in anticipated profits or any unanticipated losses resulting from such failure or neglect.
2. Before submitting a Proposal, the Bidder shall carefully examine the Project Documents and Plans, visit the site of work, fully inform themselves of all existing conditions and limitations, and include in the Proposal a sum to cover the cost of all items included. The Bidder shall make intelligent observations and inquiry as to conditions at the Project Site. No pleas of ignorance, oversight or miscalculation of the conditions prevailing shall suffice

to permit withdrawal of a Proposal submitted or to invalidate the Contract or Bond after its execution.

3. The Project Manager will make himself available to review the project site and project scope, at bidders the request.
4. **There is a voluntary pre-bid meeting for this project on May 10, 2019 at 10:00 am at Lake Arlington, 2201 N. Windsor Dr. Arlington Hts, IL 60004.**

G. QUALIFICATIONS OF BIDDER

The Park District may take action deemed necessary to investigate the qualifications of each bidder. Each bidder shall complete the Affidavit of Experience form in these Bid Documents and submit such form with the bid form. The Park District reserves the right to qualify or disqualify bidders as a result of lack of similar project experience and/or any other information obtained from the affidavit of experience form.

H. ADDENDA AND INTERPRETATION

1. All inquiries and requests for interpretations of the Bid Documents shall be made in writing no later than **24 hours prior to pre-bid meeting**. If deemed necessary, response(s) to inquiries and interpretations shall be completed and sent to bidders in the form of addenda no later than 4:00 pm, **the day before the bid opening**.
2. Any addenda shall become part of the Contract Documents.
3. Any addenda must be acknowledged by the bidder and shall become part of the Contract Documents.

I. CONTRACT DOCUMENTS

The Bidder to whom the project is awarded will be required to enter into a contract with the Arlington Heights Park District for the extent of the work and contractual amount until the completion of the agreed work. The awarded Bidder will be required to enter into a contract with the Park District within ten (10) days after acceptance of the bid price.

J. BOND REQUIREMENTS

1. Bid Bond/Bid Security - The Bidder shall submit with his bid, a Bid Bond, Cashier's Check or Certified Check in an amount not less than 10% (ten percent) of the amount of Total Base Bid.
 - a. The bid security shall be made payable to the Arlington Heights Park District, and shall be attached to the proposal.
 - b. Should the Bidder fail or refuse to enter into the agreement and furnish an acceptable bond within ten (10) calendar days after notification of acceptance of the Bidder's proposal by the Arlington Heights Park District, the bid security shall be forfeited and become the property of the Arlington Heights Park District.
 - c. In the case of the Successful Bidder, the bid security will be retained by the Park District until receipt of all contract paperwork.
 - d. All bid securities will be returned to Unsuccessful Bidders upon request, following the receipt of all contract paperwork of the Successful Bidder.

2. Performance Bond - If a bid is accepted, a performance bond, payable to the Arlington Heights Park District, for not less than one hundred (100%) percent of the contract amount.
3. Labor & Material Bond - If a bid is accepted, a performance bond, payable to the Arlington Heights Park District, for not less than one hundred (100%) percent of the contract amount will be required prior to begin services.

K. SUBMITTAL OF PLANS AND SPECIFICATIONS

1. Before commencing work, the Contractor shall submit for approval three copies of the manufacturer's information covering all materials and equipment that he proposes to furnish. The Contractor shall commence no work nor purchase any materials prior to the approval of the submittals except at the Contractor's risk. Approval of the submittals by the Owner shall not be considered a waiver of any provisions of the specifications nor shall they be construed to permit a waiver from any of the performance criteria required at the final inspection.
2. Submittals may not be required for all projects or services, and will be determined by the Owner and Contractor at a pre-construction and/or pre-services meeting.

L. MATERIALS

All materials supplied by the Contractor under the provisions of these Specifications and Plans shall be new materials of the kind and character called for. Defective equipment or material damaged in the course of installation or tests shall be replaced or repaired in a manner satisfactory to the Owner. All material and equipment to be furnished under these Specifications shall be the standard product of a manufacturer regularly engaged in the production of such material and shall be the manufacturer's current standard design.

M. SUBSTITUTION OF MATERIALS

The materials specified have been determined to have the characteristics appropriate for the purpose of the project. In the event, however, the clause "or equal" is used in the Specifications pertaining to the material or article, the use of an alternate article other than that specified must be submitted for written approval of the Owner or his representative not less than three business days prior to bid. Bids which propose to use a non-approved alternate will be rejected. The Owner reserves the right to reject any or all bids.

N. AWARDING OF CONTRACT

1. It is anticipated that a recommendation will be presented to the Board of Commissioners for approval at the regularly scheduled Park Board Meeting, **June 11, 2019**. The Arlington Heights Park District reserves the right to review all bids submitted for a period of sixty (60) days after the bid due date, and by submitting a bid, the Bidder agrees that the amount specified in its bids shall remain in full force and effect for such sixty (60) day period. No Bidder shall modify, withdraw, or cancel its bid, or any part thereof, for sixty (60) days after said bid due date, and no attempted modification, withdrawal, or cancellation shall be valid.
2. Award, Rejection or Negotiation of Bids – The contract will be awarded to the lowest responsible and responsive Bidder complying with all the provisions of the General Conditions and Instructions to Bidders, provided the bid price is reasonable and it is to the interest of the Arlington Heights Park District to accept it. The Arlington Heights Park District reserves the right to reject the bid or a Bidder who (a) has previously failed to perform properly or complete on time contracts of a similar nature, (b) when investigation shows that the Bidder is not in a position to perform the contract, (c) is delinquent on any state or

federal taxes, (d) is barred from bidding on this contract or any other contract pursuant to 720 ILCS 5/33E-3 and 720 ILCS 5/33E-4 and/or (e) is not actively engaged in work of similar size, scope and complexity as the Project Work and/or has not satisfactorily completed the minimum project work set forth herein.

3. Notwithstanding the foregoing, the Arlington Heights Park District also reserves the right to reject any or all bids and to waive or not to waive any irregularities, informalities or variances therein, or to accept any bid considered by the Arlington Heights Park District to be in the best interest of the Arlington Heights Park District. The Owner also reserves the right to accept all or part of a bid when the Arlington Heights Park District Park Board of Commissioners determines that it is in the best interest of the Arlington Heights Park District.

O. BASIS OF PAYMENT

1. Contractor shall submit a Pay Request/Invoice within ten (10) days following the end of each month and the Park District will make payment within ten (10) days after submittal of a payment request for all work performed in accord with the contract during the period.
2. Pay Requests/Invoices will be reviewed by the Owner, and the Contractor will not be paid for any weeks in which no services are rendered with respect to a particular location.
3. Payment will be made to the Contractor within thirty (30) days of completion and acceptance of the project by the Park District. As required by the IRS, a **W-9 Request For Taxpayer Identification Number and Certification Form** must be submitted to the accounting department prior to releasing payment for the project. In addition, a Vendor Application is required and will be furnished to the awarded contractor of this project.

P. RETAINAGE

The Park District shall retain 10% of every payout until the project is completed and the final payout is made.

Q. TAXES

This work is being done under the auspices of the Arlington Heights Park District and therefore is exempt from the Illinois sales tax and the Regional Transportation Authority sales tax. The proposal shall not include any costs for these taxes.

R. DELIVER CHARGES

All bid prices should include both shipping and delivery charges. These charges shall be freight (F.O.B.) to the Park District. Delivery should be to a desired point within the Park District unless otherwise stated in the call for bids. Any variation from the advertised terms should be clearly stated in the Bidder's proposal.

S. GOVERNING LAWS AND REGULATIONS

The Bidder to whom the work is awarded shall perform all work and use only those materials that conform to city, state and federal codes regarding health, safety and welfare. The Arlington Heights Park District shall be held faultless for failure of work and material that does not conform to such codes. The Contractor shall comply with Equal Opportunity clause required by the Illinois Fair Employment Practices Commission.

T. OWNERSHIP OF PLANS AND SPECIFICATIONS

1. All Plans and Specifications and copies thereof, furnished by the Owner, are his property. They are not to be used on other work, and with the exception of one complete set, are to be returned to him on request at the completion of the Contract work.
2. No plan deposit or plan fee will be required to submit a bid for this project.
3. The Plans, Specifications, Special Conditions and Proposal Form are intended to include all job items necessary to properly complete the work. If, through inadvertence or otherwise, the Plans or Specifications omit to require any work necessary for such completion, the Contractor shall, nevertheless, be required to perform such work. Plans and Specifications are intended to be consistent with one another and with other portions of the Contract. Work or materials called for by the Plans and not mentioned in the Specifications, or vice-versa, shall be performed in as faithful and thorough manner as though fully covered by both.

U. CHANGES OR ALTERATIONS OF CONTRACT WORK

1. The Owner reserves the right to alter the services by adding to or deducting from the original quantities as bid without invalidating the Contract. All such work shall be executed under the original conditions for the original contract, except for an extension in time caused by any such changes or alterations.
2. If the Contractor claims that any instructions, by drawings or otherwise, involve extra cost under this agreement, he shall give the Park District written notice therefore and obtain written approval of the extra before proceeding to execute the work. No such claim shall be valid and no payment for extra work shall be made unless the extra is approved in writing by the PARK DISTRICT.
3. The value of any change shall be determined by one or more of the following methods:
 - a. By an approved Lump Sum;
 - b. By Unit Prices given in the Contract or subsequently agreed upon;
 - c. Time and Material plus percentage. This method of cost shall be used on the Contractor's actual costs for time and material plus 20% for Contractor's overhead and profit. Contractor's actual costs shall be the direct costs for labor, payroll taxes, materials and equipment.

V. OMISSIONS AND DISCREPANCIES

Should a Bidder find discrepancies in, or omissions from bid documents, he should at once notify the Arlington Heights Park District which may send a written instruction to all Bidders. No oral interpretation by the Park District will be binding; only instruction in writing will be deemed valid. To receive consideration, requests for interpretation must be made no later than three working days prior to the date set for receipt of bids.

W. SPECIFICATION OR INFORMATION CONFLICTS

Should any Specifications, Information, Directives, Notes, Tags or Provisions contained in the Construction Documents or Technical Specifications conflict with any other Specifications, Information, Directives, Notes, Tags or Provisions contained in the Construction Documents, then the more stringent Specification, Information, Directive, Note, Tags or Provision shall apply.

X. COLLUSIVE BIDDING

The Bidder represents and warrants that its bid is made without any previous understanding, agreement or connection with any person, firm or corporation making a bid for the same Project Work; without prior knowledge or competitive prices; and is in all respects fair, without outside control, collusion, fraud or otherwise illegal action.

Y. PROGRESS MEETINGS

The Contractor shall be required to provide an opportunity for the Owner to attend appropriate progress meetings, with the Contractor [Project Foreman] and Owner. These meetings will review work schedules, progress, upcoming work and coordination with the Owner. Meetings may take place on daily, weekly or monthly basis, as determined by the Contractor and Owner prior to the start of services.

Z. PREVAILING WAGES

This contract calls for the construction of a “public work,” within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/01 et seq. (“the Act”). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the “prevailing rate of wages” (hourly cash wages plus fringe benefits) in the county where the work is performed. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor’s website at: <http://www.illinois.gov/idol>. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, *including but not limited to*, all wage, notice and record keeping duties.

1. The general prevailing rate of wages in the locality for each craft or type of worker or mechanic needed to execute the contract or perform the work, and the general prevailing rate for legal holiday and overtime work, as ascertained by the park district or the Illinois Department of Labor shall be paid for each craft or type of worker needed to execute the contract or to perform such work and it shall be mandatory upon the Contractor to whom the contract is awarded and upon any subcontractor under him to pay not less than the specified rates to all laborers, workers and mechanics employed by them in the execution of the contract or such work.
2. It shall be mandatory upon the contractor to whom a contract for public works is awarded to post, at a location on the project site of the public works that is easily accessible to the workers engaged on the project, the prevailing wage rates for each craft or type of worker or mechanic needed to execute the contract or project or work to be performed. A failure to post a prevailing wage rate as required by this Section is a violation of the Act.
3. A listing of wages for Cook County can be obtained at the website: <https://data.illinois.gov/dataset/idol-2018-prevailing-wage-rates/resource/0c95f063-aed9-4db7-adc3-c224acee8fc2>. It is the sole responsibility of the Contractor to whom the contract is awarded to pay not less than the specified rate of labor published by the Department of Labor at the time of the work.
4. The Owner may at any time inquire of the contractor as to rates of wages being paid to employees of the contractor, any subcontractor or material men, where upon such information shall be promptly provided to the Owner. A certified payroll transcript, in accordance with the Illinois Prevailing Wage Act, shall be submitted with their waiver of lien with each payout request.

AA. CERTIFIED PAYROLL

While participating on public works, the Contractor and each subcontractor shall:

1. Make and keep, for a period of not less than 3 years, records of all laborers, mechanics, and other workers employed by them on the project; the records shall include each worker's name, address, telephone number when available, social security number, classification or classifications, the hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending times of work each day.
2. Submit monthly, in person, by mail, or electronically a certified payroll to the Arlington Heights Park District. The certified payroll shall consist of a complete copy of the records identified in paragraph (1.) of this subsection (AA.) but may exclude the starting and ending times of work each day. The certified payroll shall be accompanied by a statement signed by the Contractor or subcontractor which avers that: (i) such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by the Prevailing Wage Act; and (iii) the Contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class B misdemeanor.

BB. PERMITS AND LAWS

The Contractor shall be responsible for obtaining any and all County, State and Village of Arlington Heights Permits, Licenses, Bonds, or other permits which may be required. The Contractor shall at all times observe and comply with all Federal, State and Local Laws, regulations and ordinances which, in any manner, affect the conduct of his work. Any complaint, claim, or action brought against the Contractor for failing to observe or comply with any law, ordinance or regulation shall be the sole responsibility of the Contractor and shall in no way extend to or expose the Park District to liability and the Contractor shall indemnify and hold harmless the Park District from any and all such complaints, claims or actions. Before beginning work, the Contractor shall obtain from the proper officers all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

CC. WORKING HOURS

The Contractor will be allowed to schedule his normal work between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday. Work during other hours will be allowed only on an emergency basis and as authorized by the Park District. The Contractor will be allowed to commence immediately upon execution of the agreement documents and issuance of all pertinent permits.

DD. LIENS

The final payment shall not be due until the Contractor has delivered to the Park District a complete release of all liens or claims for lien arising out of this Contract, or at the election of Park District, receipts in full covering all labor and materials for which a lien could be filed, or a bond satisfactory to the Park District indemnifying him against any lien.

EE. INSURANCE

1. Contractor shall maintain throughout the agreement, as a minimum, the following insurance policies set forth by PDRMA and contained in its entirety on Attachment AI.
2. **The District shall be named as additional insured under the commercial general liability coverage.** This insurance shall apply as primary insurance. Any other insurance or self-insurance maintained by the District shall be excess of Company's insurance and shall not contribute with it.
3. The Contractor awarded the bid shall furnish to District one (1) copy of certificate of insurance made in favor of the Arlington Heights Park District and the Contractor.

END OF SECTION

OBLIGATIONS OF SUCCESSFUL BIDDER

1. The successful bidder shall abide by and comply with all applicable local and state laws relating to fair employment practices and prohibiting discrimination in contracts involving public funds or the construction or development of public buildings, works or facilities.
2. The successful bidder shall abide by and comport with all local and state laws relating or pertaining to the development and/or construction of public works, buildings or facilities, including but not in any manner limited to any and all applicable workmen's compensation acts or laws.
3. The successful bidder must comply with the provisions of the Illinois Human Rights Act ("Act") dealing with equal employment opportunities (Section 2-105, 775 ILCS 5/2-105), including equality of employment opportunity and the regulations of the Department of Human Rights of the State of Illinois and also must provide for the adoption and implementation of written Sexual Harassment Policies. The contract with the successful bidder will provide for this requirement. The statutory provisions setting forth what such policies shall include as a minimum under the Act are on file with the District and available to the bidder upon request.
4. The successful bidder must comply with the provisions of the Illinois Substance Abuse Prevention on Public Works Act

END OF SECTION

**ARLINGTON HEIGHTS PARK DISTRICT BID WORKSHEET
PARKING LOT RESURFACING PROJECT**

Contractor's Name: _____
 Phone Number: _____
 Fax Number: _____
 Email Address: _____

The undersigned as a Bidder declare that he/she has carefully examined the plans and specifications, including the detailed drawings and specifications and all instructions and statement of requirements, and that he/she is fully familiar therewith: and having carefully examined the site and completely familiarized with local conditions affecting the cost of the work: hereby states that he/ she will provide all necessary labor, equipment, tools, machinery, apparatus and all other means of construction, do all the work and furnish all materials, called for by said plans and specifications in the manner prescribed by in accordance with the requirements of the contract, specifications and drawings for the construction of above project in Arlington Heights, Illinois as prepared by the Arlington Heights Park District: and will accept as full and complete payment therefore the base bid amount which is the summation of the cost of the items of work and is equal to the summation of the total of the unit prices in the amount as listed herein. The quantities **indicated below** are approximate and intended as a guide for bidding purposes. These agreed to unit prices are being provided should field conditions, as determined by the engineer and park district representative, require an increase in the scope of project work. The Contractor is responsible for all CPSAC, ASTM, and State of Illinois regulations that ensure the proper and safe installation of the equipment. The Arlington Heights Park District reserves the right to eliminate sections of this bid, which is not favorable to its best interest. The contractor shall field verify the location and depth of buried site utilities prior to starting this project. Substitution of a product material or equipment of like quality by another manufacturer/supplier as an equal or better must receive written approval from the owner no less than five work days before bids are due. In writing the owner will notify the requester and all other bidders of the additional approved items. Field adjust where needed upon written approval of owner.

PROJECT TITLE: Arlington Heights Park District - Lake Arlington Parking Lot Resurfacing
PROJECT LOCATION: 2201 N. Windsor Drive, Arlington Hts., IL 60004
PRE-BID MEETING: May 10, 2019 10:00 a.m. At 2201 N. Windsor Dr.
BID DUE DATE: May 16, 2019 at 2:00 p.m. at Administration Building at 410 N. Arlington Hts. Rd.

Item	Demolition	Qty	Unit	Price/unit	Total
<i>General: Full depth removal to include pavement, and aggregate base (depths to vary). To also include offsite trucking and disposal fees.</i>					
	Remove of asphalt surface and binder course (existing stone base section to remain. Blade, shape, and re-compact existing stone as necessary to achieve proposed grades. Provide additoinal stone as needed.) including off-site trucking and disposal fees. Existing stone base to be reshaped and recompacted.	6,720	SY	\$ -	\$ -
	Sawcut pavement to full depth.	1,050	LF	\$ -	\$ -
	Remove asphalt pavement (full depth) including off-site trucking and disposal fees.	180	SY	\$ -	\$ -
	Remove concrete pavement and aggregate base (full depth) including off-site trucking and disposal fees.	50	SY	\$ -	\$ -
	Remove depressed, concrete curb and gutter.	315	LF	\$ -	\$ -
	Remove B-6.12 curb and guttter.	335	LF	\$ -	\$ -

ARLINGTON HEIGHTS PARK DISTRICT BID WORKSHEET
PARKING LOT RESURFACING PROJECT

	Remove light post(s) and concrete foundation(s) as indicated on drawing. Existing conduit to be reused if possible.	11	EA	\$ -	\$ -
	Remove tree	1	EA	\$ -	\$ -
	Provide tree protection as indicated on Sheet C501	505	LF	\$ -	\$ -
	Supplemental Unti Cost- Full depth removal of asphalt path (Extents to be indicated by Owner)		SY	\$ -	\$ -
Project Total					\$0.00

Item	Erosion Control	Qty	Unit	Price/unit	Total
	Furnish and install Silt Fence	115	LF	\$ -	\$ -
	Temporary concrete washout facility	1	EA	\$ -	\$ -
	Furnish and install temporary construction fence. (Quantity to be determined by contractor)	1	EA	\$ -	\$ -
	Furnish and install "Catch-All" Inlet Protectors	17	EA	\$ -	\$ -
Project Total					\$0.00

Item	Site Paving	Qty	Unit	Price/unit	Total
	Furnish and install new bituminous asphalt pavement on exisitng stone base. (2" Surface, 2 1/2" Binder, Prime Coat, existing stone base to remain). Stone base to be reshaped and recompactd and proof-rolled to achieve proposed grades.	6,735	SY	\$ -	\$ -
	Furnish and install asphalt pavement section (2" Surface, 2 1/2" Binder, Prime Coat, 8" Aggregate Base Course, Type B, Crushed).	200	SY	\$ -	\$ -
	Furnish and install heavy-duty concrete pavement section. (8" PCC, 6"x6" W1.4xW1.4 Welded Wire Fabric, 6" Aggregate Base) [Dumpster Pad]	65	SY	\$ -	\$ -
	Furnish and install Portland Cement Concrete Sidewalk (5" PCC, 6"x6" W1.4xW1.4 Welded Wire Fabric, 2" Aggregate Base)	60	SY	\$ -	\$ -
	Furnish and install depressed Barrier Type Curb	90	LF	\$ -	\$ -
	Furnish and install Barrier Type Curb per Detail Provided on Sheet C601	240	LF	\$ -	\$ -

**ARLINGTON HEIGHTS PARK DISTRICT BID WORKSHEET
PARKING LOT RESURFACING PROJECT**

Supplemental Unit Cost- Path Work: Furnish and install asphalt pavement section (2" Surface, 2 1/2" Binder, Prime Coat, 8" Aggregate Base Course, Type B, Crushed). Extents of work to be indicated by owner.		SY	\$ -	\$ -
Project Total				\$0.00

Item	Site Utility	Qty	Unit	Price/unit	Total
	Provide new light post, electrical wiring, and light pole bases as indicated on "E" Series plan sheets	12	EA	\$ -	\$ -
Project Total					\$0.00

Item	Miscellaneous Site Items	Qty	Unit	Price/unit	Total
	Install 6' concrete wheel stop(s)	2	EA	\$ -	\$ -
	Install ADA signage	5	EA	\$ -	\$ -
	Furnish and install ADA signe mounted on bollard	1	EA	\$ -	\$ -
	Provide 6' cedar plank fence and gate	80	LF	\$ -	\$ -
	Install latex paint pavement striping	1	LS	\$ -	\$ -
	Install thermoplastic paint pavement striping	1	LS	\$ -	\$ -
Project Total					\$0.00

BASE BID TOTAL

\$

Alternate Unit Costs

Item	Alternate(s)	Qty	Unit	Price/unit	Total
	ALTERNATE #1: ADD Provide 6'x6' heavy-duty, concrete collar around drainage structures located at center of drive aisle.	2	EA	\$ -	\$ -
	ALTERNATE #2: ADD Install 10' - 4" (x4) perforated PVC finger drains at existing storm strucutre(s) per detail provided on C602.	13	EA	\$ -	\$ -
	ALTERNATE #3: ADD Provide Tensar GlasPave 50 between base course and surface course of new asphalt pavement ssection.	6,940	SY	\$ -	\$ -
	ALTERNATE #4: ADD (See sections below)	Total Cost obtained from below			\$0.00
Alternate Total					\$0.00

ARLINGTON HEIGHTS PARK DISTRICT BID WORKSHEET
PARKING LOT RESURFACING PROJECT

Alternate 4 Unit Costs

Item	Alternate(s)	Qty	Unit	Price/unit	Total
	Remove brick pavers as indicated on plans	280	SY	\$ -	\$ -
	Remove concrete pavement and aggregate base (full depth) including off-site trucking and disposal fees.	35	SY	\$ -	\$ -
	Remove concrete band curb(full depth) including off-site trucking and disposal fees.	240	LF	\$ -	\$ -
	Remove metal bike rack loops	6	EA	\$ -	\$ -
	Furnish and install Portland Cement Concrete Sidewalk (5" PCC, 6"x6" W1.4xW1.4 Welded Wire Fabric, 2" Aggregate Base)	325	SY	\$ -	\$ -
	Install ADA compliant detectable warning tiles	20	LF	\$ -	\$ -
Alternate #4 Total					\$0.00

BASE PLUS ALTERNATES TOTAL

\$

BID PARAMETERS: Please check each box to acknowledge understanding and compliance of said parameters.

- The bidder hereby agrees to provide all labor, materials, tools and equipment required to complete project construction in conformance with the terms of the Bid Documents.
- The bidder understands that for Bid Security, a properly Certified Check, Cashier's Check or Bid Bond payable to the Arlington Heights Park District for not less than ten (10%) percent of the Total Base Bid amount must be included with bid.

Form of Bid/Security _____, in the amount
of \$ _____ is enclosed.

Signature: _____

Date: _____

Printed Name: _____

Title: _____

Company Name: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

C. ADDENDA

Each Bidder for this project shall be responsible for acknowledging all addenda that he has received during the bidding period. In the appropriate place, please sign for each addendum received.

ADDENDUM NO. 1:

Signature	Title
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ADDENDUM NO. 2:

Signature	Title
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ADDENDUM NO. 3:

Signature	Title
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ADDENDUM NO. 4:

Signature	Title
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ADDENDUM NO. 5:

Signature	Title
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D. AFFIDAVIT OF EXPERIENCE (*This Affidavit must be executed*)

STATE OF _____)
) SS
COUNTY OF _____)

_____, being duly sworn, says that he/she is
(printed name)

_____ of _____
(sole owner, member of firm, corporate official) (individual, firm, corporate name)

which has performed playground renovations projects for the following parties of or the general kind and approximate magnitude required under this Contract? Submit at least three (3) references for similar projects completed within the past two (2) years.

1. Company/Agency Name: _____

Contact Person/Title/Phone: _____

Contract Total: _____ Dates of Service: _____

2. Company/Agency Name: _____

Contact Person/Title/Phone: _____

Contract Total: _____ Dates of Service: _____

3. Company/Agency Name: _____

Contact Person/Title/Phone: _____

Contract Total: _____ Dates of Service: _____

and that _____ will be assigned to work under this Contract,
(name of sales representative)

and that his experience in this kind of work as shown above:

(Signature)

I, the undersigned, a notary public in and for the State and County aforesaid, hereby certify that

_____ appeared before me this day in person and, being first duly sworn on oath, acknowledged that he/she executed the foregoing certification as his/her free act and deed.

Dated: _____ Notary Public: _____

****SEAL****

E. ANTI-COLLUSION AFFIDAVIT

_____, being first duly sworn, deposes and says:

That he is _____ of _____
(Partner, Officer, Owner, etc.) (Contractor)

The party making the foregoing proposal or bid, that such bid is genuine and not collusive, or sham; that said Bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any Bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person; to fix the bid price element of said bid, or of that of any other bidder, or to secure any advantage against any other bidder or any person interested in the proposed contract.

The undersigned certifies that he is not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid-rigging or bid-rotating.

(Name of Bidder if the Bidder is an Individual)
(Name of Partner if the Bidder is a Partnership)
(Name of Officer if the Bidder is a Corporation)

I, the undersigned, a notary public in and for the State and County aforesaid, hereby certify that

_____ appeared before me this day in person and, being first duly sworn on oath, acknowledged that he/she executed the foregoing certification as his/her free act and deed

this _____ day of _____ 20 _____

Notary Public: _____

****SEAL****

F. CONTRACTOR'S CERTIFICATION

In Compliance with P.A. 85-1295 – Illinois Revised Statute, Chapter 38, Section 33E-11

_____ as a _____
(Printed name of Vendor) (Individual, Partnership, Corporation)

As part of his bid on the above-sole referenced Contract, hereby certifies that the Contractor is not barred from bidding on the above referenced contract as a result of a violation of either Section 33E-3 Bid-rigging or 33E-4 Bid-stating of Article 33E of the Illinois Criminal Code of 1961, as amended.

By: _____

Title: _____

Date: _____

STATE OF ILLINOIS)
)
SS)
COUNTY OF _____)

I, the undersigned, a notary public in and for the State and County aforesaid, hereby certify that

_____ appeared before me this day in person and, being first duly sworn on oath, acknowledged that he/she executed the foregoing certification as his/her free act and deed

this _____ day of _____ 20 _____

Notary Public: _____

****SEAL****

G. SUBCONTRACTORS & SUPPLIERS

The sub-contractors and suppliers listed below will be involved in this contract work in the assignments listed. We understand that any deviation from this list must be requested and approved in writing ten (10) days before the start of the work that is involved.

Failure to complete this list will result in rejection of bid.

Legal name, current telephone number and address of all subcontractors must be included.

Sub-Contractors/Address	Work Assignment/Phone

Suppliers/Address/Phone	Material

Add additional sheets, as necessary, for more sub-contractors and vendors.

H. WRITTEN SEXUAL HARASSMENT POLICY CERTIFICATION

The undersigned, on behalf of the entity making this proposal or bid, certifies that a written sexual harassment policy is in place, pursuant to Public Act 87-1257, effective July 1, 1993, 775 ILCS 5/2-105 A).

This Act has been amended to provide that every party to a public contract must have a written sexual harassment policy that includes, at a minimum, the following information:

1. The illegality of sexual harassment;
2. The definition of sexual harassment, under State law;
3. A description of sexual harassment, utilizing examples;
4. The vendor's internal complaint process including penalties;
5. The legal recourse, investigative and complaint process available through the Department of Human Rights and the Human Rights Commission;
6. Directions on how to contact the Department and Commission;
7. Protection against retaliation as provided by 6-101 of the Act.

IT IS EXPRESSLY UNDERSTOOD THAT THE FOREGOING STATEMENTS AND REPRESENTATIONS AND PROMISES ARE MADE AS A CONDITION TO THE RIGHT OF THE BIDDER TO RECEIVE PAYMENT UNDER AND AWARD MADE UNDER THE TERMS AND PROVISION OF THIS BID.

SIGNATURE: _____

NAME: _____ TITLE: _____

Subscribed and sworn to me on this ____ day of _____ 20____, A.D.

By: _____
(Notary Public)

Seal

I. LEGAL COMPLIANCE AND INSURANCE AGREEMENT

THIS AGREEMENT entered into by and between _____, hereinafter referred to as "Bidder" and Arlington Heights Park District, hereinafter referred to as the "Owner" or "District".

WHEREAS, Bidder may be performing work ("Work") under one or more contracts with the District, entered into or to be entered into from time to time, which Work will be performed on and/or off premises of the Owner and said Bidder may have subcontractors and/or one or more employees engaged in the performance of the Work.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, and other good and valuable consideration received and to be received, the Bidder hereby agrees:

1. To comply with all applicable laws, regulations and rules promulgated by any federal, state, county, municipal and/or other governmental unit or regulatory body now in effect or which may be in effect during the performance of the Work. Included within the scope of the laws, regulations and rules referred to in this paragraph but in no way to operate as a limitation are all forms of traffic regulations, public utility and intrastate and Interstate Commerce Commission regulations, worker's compensation laws, prevailing wage laws and the Social Security Act of the federal government and any of its titles, the Illinois Department of Human Rights, the Illinois Human Rights Commission, or Equal Employment Opportunity Commissioner statutory provisions and rules and regulations.
2. To protect, indemnify, hold and save harmless and defend the Owner, its public officials, employees, volunteers, and agents against any all claims, loss, judgments, liabilities, actions, damages, injuries and expenses, including but not limited to attorney's fees, incurred by reason of any lawsuit or claim for compensation arising in favor of any person, including but not limited to the employees, officers, or independent contractors of subcontractors of the Bidder or Owner, an account of personal injuries or death, or damage to property occurring, growing out of, incident to, or resulting directly or indirectly from the performance of the Work by the Bidder or any of its subcontractors, whether such loss, damage, injury or liability is contributed to by the negligence of the Owner or by premises themselves or any equipment thereon, whether latent or patent, or from other causes whatsoever, except that the Bidder shall have no liability for damages or the cost incident thereto caused by the sole negligence of the Owner.
3. To keep in force, to the satisfaction of the Owner, at all times during the performance of the Work referred to above, Commercial General Liability (CGL) Insurance and if necessary, Commercial Umbrella Insurance with a limit of not less than \$1,000,00 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location. Automobile Liability Insurance with bodily injury, personal injury, and property damage limits of not less than \$2 million per occurrence and \$2 million annual aggregate, and worker's compensation and related insurance coverage at amounts required by statute, and employer's liability insurance with limits of not less than \$1,000,000. The Bidder agrees that prior to Work commencing, proof of such insurance coverage will be submitted to the Owner. There shall be no additional charge for said insurance to the Owner.

The Bidder shall furnish certificate of insurance for the insurance coverage required herein, naming the Owner, its public officials, employees, volunteers, and agents as additional insured and providing that such policies may not be cancelled or amended without 30 days prior written notice having been given to the Owner. The policies shall also contain "contractual liability clauses." The policies shall have no exclusions that would conflict with the project being bid. Any deductibles over \$10,000 will be disclosed at the time of bid submission to the Owner. All limits required will be specific to the project bid. Bidder shall include all subcontractors as insured under its policies or furnish separate certificates.

Coverage afforded the Owner, its officials, employees and volunteers as insured applies as primary, and not excess or contributing to any insurance issued in the name of the Owner. Finally, the Bidder agrees to waive any rights of subrogation. Coverage shall be at least as broad as 1988 ISO CGC Form or equivalent, ISO Business auto coverage form No. CA 0001 0187 covering automobile liability workers compensation employees' liability, as required by the State of Illinois.

If any policy is written on a claims-made basis, then the Bidder shall purchase, prior to commencement of the Work, such additional insurance as may be necessary to provide specified coverage to the Owner for a period of not less than five years from the termination of this agreement.

4. To furnish any affidavit or certificate, in connection with the Work to which this agreement pertains, as provided by law.
5. To indemnify Owner, its public officials, employees, volunteers, and agents for any loss, Bidder may sustain by reason of theft or other cause or from the acts or negligence of the employees of the Bidder or of its subcontractors.

IT IS MUTUALLY UNDERSTOOD AND AGREED that the Bidder shall have full control of the ways and means of performing the work referred to above and that the bidder or his/its employees, representatives or subcontractors are in no manner employees of the Owner. The bidder and any party employed by the Bidder are independent contractors.

This Agreement shall be effective upon acceptance by Owner of any bid from Bidder and shall continue unless and until mutually terminated in writing by an instrument in writing signed by both Bidder and Owner.

IN WITNESS WHEREOF, THE PARTIES have executed this agreement

this _____ day
of _____, 20_____

FIRST PARTY, Bidder

Title: _____

SECOND PARTY, Arlington Heights Park District

Title: _____

J. ILLINOIS DRUG FREE WORK PLACE STATEMENT

The bidder acknowledges its obligations under the Illinois Drug-Free Workplace Act and certifies it will provide a drug-free workplace by publishing a statement that includes:

1. Notify employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the work place;
2. Specifying the actions that will be taken against employees for violating this provision;
3. Notifying the employees that, as a condition of their employment to do work under the contract with the Arlington Heights Park District, the employee will:
 - a) Abide by the terms of the statement;
 - b) Notify the undersigned of any criminal drug statute conviction for a violation occurring in the work place not later than five (5) days after such a conviction;
4. Establishing a drug free awareness program to inform employees about:
 - a) The dangers of drug abuse in the work place;
 - b) The policy of maintaining a drug-free work place;
 - c) Any available drug counseling, rehabilitation or employee assistance program;
 - d) The penalties that may be imposed upon an employee for drug violations;
5. The undersigned shall provide a copy of the required statement to each employee engaged in the performance of the contract with the Arlington Heights Park District, and shall post the statement in a prominent place in the work place;
6. The undersigned will notify the Arlington Heights Park District within ten (10) days of receiving notice of an employee's conviction;
7. Make a good faith effort to maintain a drug free work place through the implementation of these policies;
8. The undersigned further affirms that within thirty (30) days after receiving notice of a conviction of a violation of the criminal drug statute occurring in the work place, he shall:
 - a) Take appropriate action against such employee up to and including termination; or
 - b) Require the employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency;

IT IS EXPRESSLY UNDERSTOOD THAT THE FOREGOING STATEMENTS AND REPRESENTATIONS AND PROMISES ARE MADE AS A CONDITION TO THE RIGHT OF THE BIDDER TO RECEIVE PAYMENT UNDER ANY AWARD MADE UNDER THE TERMS AND PROVISIONS OF THIS BID.

Signed: _____ Date: _____

Title: _____

I, the undersigned, a notary public in and for the State and County aforesaid, hereby certify that
_____ appeared before me this day in person and, being first duly sworn
on oath, acknowledged that he/she executed the foregoing certification as his/her free act and
deed this _____ day of _____ 20 _____

Notary Public: _____

****SEAL****

K. SUBSTANCE ABUSE PREVENTION FORM

The Substance Abuse Prevention Act, Public Act 95-0635, prohibits the use of drugs and alcohol, as defined in the Act, by employees of the Contractor and by employees of all Subcontractors while performing work on a public works project. The Contractor/Subcontractor herewith certifies that it has a superseding collective bargaining agreement or makes the public filing of its written substance abuse prevention program for the prevention of substance abuse among employees who are not covered by a collective bargaining agreement dealing with the subject as mandated by the Act.

- A. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has signed collective bargaining agreements that are in effect for all of its employees, and deal with the subject matter of Public Act 95-0635.

Contractor/Subcontractor

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative

Date

- B. The undersigned representative of the Contractor/Subcontractor certifies that the contracting entity has signed collective bargaining agreements that are in effect for all of its employees, and deal with the subject matter of Public Act 95-0635.

Contractor/Subcontractor

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative

Date

L. PREVAILING WAGE ACT, AS AMENDED, EFFECTIVE JANUARY 1, 2010

The undersigned, on behalf of the entity making this proposal or bid, certifies that a written prevailing wage notification policy is in place, pursuant to Illinois Prevailing Wage Act, 820 ILCS 130/1 et. seq. requiring that all laborers, workers, and mechanics employed by the Park District, or on its behalf, for the public works projects, be paid not less than the general prevailing wage. This applies to contractor and any sub contractor working on the project. This Act was amended January 1, 2010 to provide that every party to a public contract where labor is involved be notified of the requirement for paying prevailing wage and submitting certified payroll. The prevailing rate of wages are revised by the Department of Labor and are available on the Department's official website: <https://www2.illinois.gov/idol/Laws-Rules/CONMED/>. The Act includes, at a minimum, the following:

1. The notification to contractors of the prevailing wage requirement on all public works projects.
2. The collection by Park District of certified payroll for all laborers including those hired by contractors.
3. It is the contractor's responsibility to inform laborers of prevailing wage rates.
4. It is the contractor's responsibility to provide certified payroll for all laborers (including subcontractors) name, occupation, and actual hourly wages paid and forwarding that information to the Park District with each progress payment and upon final payment.
4. The Contractor's Bond must include provision of the faithful performance of the prevailing wage clause as listed on page 13.
5. The legal recourse should the Prevailing Wage Act be violated includes fines for noncompliance as determined by the Department of Labor, (NEW: Sec. 4(b-2), effective January 1, 2010).

IT IS EXPRESSLY UNDERSTOOD THAT THE FOREGOING STATEMENTS AND REPRESENTATIONS AND PROMISES ARE MADE AS A CONDITION TO THE RIGHT OF THE BIDDER TO RECEIVE PAYMENT UNDER AND AWARD MADE UNDER THE TERMS AND PROVISION OF THIS BID.

SIGNATURE: _____

NAME: _____ TITLE: _____

Subscribed and sworn to me on this ____ day of _____, 20____, A.D.

By: _____
(Notary Public)

Seal

M. AGREEMENT

This Agreement made this _____ day of _____, 20_____, by and between _____, hereinafter called the “CONTRACTOR” and the ARLINGTON HEIGHTS PARK DISTRICT, hereinafter called the “PARK DISTRICT”.

WITNESSETH, that the CONTRACTOR and the PARK DISTRICT for the consideration stated here-in agree as follows:

ARTICLE I – SCOPE OF WORK: The CONTRACTOR shall provide all of the materials and perform all of the work described in the specifications entitled:

Lake Arlington Parking Lot Improvements

and in strict accordance with the requirements of all of the component parts of this Agreement as noted under Article V, all of which are attached hereto and made a part hereof.

ARTICLE II – TIME OF COMPLETION: This work to be performed under this agreement shall be commenced **9/16/2019** and shall be completed **11/15/2019**.

The initial contract places no obligation on the PARK DISTRICT to appropriate funds for the park mowing services beyond the initial term of the contract and contract extensions are dependent upon sufficient funds being appropriated each fiscal year by the Owner of this work.

ARTICLE III – CONTRACT PRICE: The PARK DISTRICT shall make payments to the CONTRACTOR for the completed performance of work included in this agreement in compliance with the prices as noted in the CONTRACTOR’S bid and in accord with any subsequent approved agreement change orders subject to all of the provisions of the component parts of this agreement.

Base Bid \$ _____

ARTICLE IV – COMPLIANCE WITH LAW: The CONTRACTOR shall comply with all statutes, rules and regulations of all Federal, State and Local Agencies having jurisdiction over the proposed improvement at the time the proposal was submitted to the PARK DISTRICT. Any and all costs associated in complying with said statutes, rules and regulations in effect at the time proposals were submitted and due shall be included within the costs of the proposal submitted.

ARTICLE V – COMPLIANCE WITH PREVAILING WAGE ACT: This contract calls for the construction of a “public work,” within the meaning of the Illinois Prevailing Wage Act, 820 ILCS 130/.01-04 et seq. (“the Act”). The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the “prevailing rate of wages” (hourly cash wages plus fringe benefits) in the county where the work is performed. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor’s website at: <http://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/prevailing-wage-rates.aspx>. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage, notice and record keeping duties. The prevailing rate of wages are revised by the Department of Labor and are available on the Department’s official website.

ARTICLE VI – COMPLIANCE WITH ADA: In addition to the obligations set forth in Article IV, the contractor confirms that the materials and/or products listed in the proposal for bid do comply with the Americans with Disabilities Act, Title II, the ADA Accessibility Guidelines, the Illinois Accessibility Code, and all rules and regulations promulgated with reference thereto. In addition, if the contractor is obligated by this agreement to install the materials and/or products, the contractor shall install the materials and/or products in compliance with the Americans with Disabilities Act, Title II, ADA Accessibility Guidelines, the Illinois Accessibility Code, and all rules and regulations promulgated with reference thereto. All costs of compliance with said statutes, rules and regulations in effect at the time the contractor submitted its bid have been included in the contract price.

ARTICLE VII – COMPONENT PARTS OF THIS AGREEMENT: This agreement consists of the following component parts, all of which are as fully a part of this agreement as if herein set out verbatim, or if not attached, as if attached hereto:

- Instructions to Bidders
- Bid Form
- This Agreement
- Conditions of the Bid
- Anti-Collusion, Sexual Harassment, Illinois Drug Free, Substance Abuse Affidavits and Contractor’s Certification
- Special Conditions
- Addenda, (if any)
- Construction Drawings

In the event that any provisions in any of the above component parts of the agreement conflict with any provision in any other component parts, the provision in the component part last enumerated above shall govern over any other component part which precedes it numerically, except as may otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in the original counterparts the day and year first above written.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in three (3) original counterparts the day, month and year first above written.

CONTRACTOR: _____

ADDRESS: _____

SIGNATURE: _____ Title: _____

Attest: _____ Title: _____

****SEAL****

PARK DISTRICT: ARLINGTON HEIGHTS PARK DISTRICT

SIGNATURE: _____ TITLE: _____

Attest: _____ Title: _____

****SEAL****

be accomplished between the hours of 7:00 a.m. and 3:00 p.m. Village ordinance will not allow construction to begin before 7:00 a.m. on any day. Mowing operations can only be conducted between 8:00 a.m. and 3:00 p.m. on Saturday and 9:00 a.m. and 4:00 p.m. on Sunday. With prior owner notification and approval.

1.09 **INTERACTION WITH PARK PATRONS**

The Arlington Heights Park District gives priority of use to its park patrons. The Contractor's vehicles and personnel shall be marked as to be easily identifiable by the park patrons. The work force of the Contractor shall be courteous to park patrons at all times. The work of the Contractor shall not interfere with scheduled events in a park and shall not, within reason, interfere with patrons' enjoyment of a park area. Any conflict or potential conflict between the work force and park patron shall be reported to the Maintenance Supervisor immediately. Rescheduling of work because of patron use shall not be grounds for failure to comply with frequency of service specified herein.

1.11 **PUBLIC SAFETY**

The Contractor shall not operate machinery in a manner that would in any way endanger park patrons. The Contractor shall be particularly careful to protect against injury from objects thrown by mowing equipment. Contractor will not operate any equipment on Park District property with altered or missing guards or safety equipment.

1.12 **PROTECTION OF UTILITIES**

The Contractor shall protect all utilities from damage, shall immediately contact the appropriate utility if damage should occur and shall be responsible for all claims for damage resulting from Contractor's operations.

1.13 **CONCURRENT OPERATIONS**

This contract is a non-exclusive contract with the Arlington Heights Park District. The Arlington Heights Park District reserves the right to use other contractors or its own employees to perform work similar to that being performed under the terms of this contract. Performance of work by others shall be construed as being consistent with the terms of this contract and shall not be cause for the Contractor to cease performance of work as directed.

1.14 **CLEAN-UP**

At the end of each day's work and after completing the improvement, and as may be required by the Park District, the Contractor shall pick up all debris and loose material and remove them from the job site or deposit them in approved refuse containers furnished by the Contractor.

All refuse containers shall be covered and emptied as needed, in order to eliminate blowing refuse at the project site. The Contractor is responsible for the offsite disposal of all debris or excavated materials from this project. Onsite burying of material is not permitted. At the completion of this project, it will be the Contractor's responsibility to immediately restore any and all areas, services, structures, etc., which may have been damaged due to operations of the Contractor.

If the Contractor fails to clean up and/or restore the site at the completion of the work, the Park District may do so, and the cost thereof shall be charged to the Contractor.

1.15 SITE PROTECTION

The Contractor shall be responsible for adequate job site safety protection. The park area is used daily by the public and adequate protection for park users must be provided.

1.16 DAMAGE TO OTHER WORK

Should the Contractor, his agents or his workers, or any of his subcontractors or material/men cause damage to the Park District, or to the work or materials of other contractors or persons, the damage and the repair or replacement of same shall be the sole responsibility of the Contractor. The repairs and replacing of damaged work shall be under the direction of the Park District, and the cost of same shall be the responsibility of the Contractor.

1.17 WORKING HOURS

The Contractor will be allowed to schedule his normal work between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday. Work during other hours will be allowed only on an emergency basis and as authorized by the Park District. The Contractor will be allowed to commence immediately upon execution of the agreement documents and issuance of all pertinent permits.

1.18 TIME OF COMPLETION AND WORK SCHEDULE

The Contractor, as a part of the bid, shall prepare and submit an Estimated Progress Schedule for the work. The progress schedule shall be related to the entire project to the extent required by the bid forms, and shall provide for expeditious and practical execution of the work. The Contractor shall also inform the Park District, who his project superintendent is and set up a pre-construction meeting. The superintendent shall represent the Contractor, and all communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be so confirmed on written request in each case.

END OF SECTION

Attachment A1

INSURANCE REQUIREMENTS ROUTINE CONSTRUCTION, MAINTENANCE AND REPAIR PROJECTS

Contractor shall obtain insurance of the types and in the amounts listed below.

A. Commercial General and Umbrella Liability Insurance

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 10 93, or a substitute form providing equivalent coverage, and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

Owner shall be included as an insured under the CGL, using ISO additional insured endorsement CG 20 10 or a substitute providing equivalent coverage, and under the commercial umbrella, if any. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance afforded to Owner. Any insurance or self-insurance maintained by Owner shall be excess of the Contractor's insurance and shall not contribute with it.

There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, or underground property damage.

B. Continuing Completed Operations Liability Insurance

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 each occurrence for at least three years following substantial completion of the work.

Continuing CGL insurance shall be written on ISO occurrence form CG 00 01 10 93, or substitute form providing equivalent coverage, and shall, at minimum, cover liability arising from products-completed operations and liability assumed under an insured contract.

Continuing CGL insurance shall have a products-completed operations aggregate of at least two times its each occurrence limit. Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

Failure to maintain the required insurance may result in termination of this Contract at Owner's option.

With respect to insurance maintained after final payment in compliance with a requirement above, an additional certificate(s) evidencing such coverage shall be promptly provided to Owner whenever requested. Contractor shall provide certified copies of all insurance policies required above within 10 days of Owners written request for said copies.

2. Acceptability of Insurers

For insurance companies which obtain a rating from A.M. Best, that rating should be no less than A VII using the most recent edition of the A.M. Best's Key Rating Guide. If the Best's rating is less than A VII or a Best's rating is not obtained, the Owner has the right to reject insurance written by an insurer it deems unacceptable.

3. Cross-Liability Coverage

If Contractor's liability policies do not contain the standard ISO separation of insureds' provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

4. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to the Owner. At the option of the Owner, the Contractor may be asked to eliminate such deductibles or self-insured retentions as respects the Owner, its officers, officials, employees, volunteers and agents or required to procure a bond guaranteeing payment of losses and other related costs including but not limited to investigations, claim administration and defense expenses.

5. Subcontractors

Contractor shall cause each subcontractor employed by Contractor to purchase and maintain insurance of the type specified above. When requested by the Owner, Contractor shall furnish copies of certificates of insurance evidencing coverage for each subcontractor.

F. Indemnification

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Architect and their officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses including but not limited to legal fees (attorney's and paralegals' fees and court costs), arising out of or resulting from the performance of the Contractor's work, provided that any such claim, damage, loss or expense (i) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, other than the work itself, including the loss of use resulting there from and (ii) is caused in whole or in part by any wrongful or negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except to the extent caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate,

abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph. Contractor shall similarly protect, indemnify and hold and save harmless the Owner, its officers, officials, employees, volunteers and agents against and from any and all claims, costs, causes, actions and expenses including but not limited to legal fees, incurred by reason of Contractor's breach of any of its obligations under, or Contractor's default of, any provision of the Contract.

- C. Application of tack coat shall be by distributor spray bar. Hand spraying shall be kept to a minimum.
- D. Place paving geotextile promptly according to manufacturer's written instructions. Broom or roll geotextile smooth and free of wrinkles and folds. Overlap longitudinal joints 4 inches and transverse joints 6 inches.
 - 1. Protect paving geotextile from traffic and other damage and place hot-mix asphalt paving overlay the same day.

3.7 HOT-MIX ASPHALT PLACING

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
 - 1. Place hot-mix asphalt base course in number of lifts and thicknesses indicated.
 - 2. Spread mix at minimum temperature of 250 deg F.
 - 3. Begin applying mix along centerline of crown for crowned sections and on high side of one-way slopes unless otherwise indicated.
 - 4. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.
- B. Place paving in consecutive strips not less than 10 feet wide unless infill edge strips of a lesser width are required.
 - 1. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Complete a section of asphalt base course before placing asphalt surface course.
- C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

3.8 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.
 - 1. Clean contact surfaces and apply tack coat to joints.
 - 2. Offset longitudinal joints, in successive courses, a minimum of 6 inches and not more than 12 inches.
 - 3. Offset transverse joints, in successive courses, a minimum of 24 inches.
 - 4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints according to AI MS22, for both "Ending a Lane" and "Resumption of Paving Operations."
 - 5. Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
 - 6. Compact asphalt at joints to a density within 2 percent of specified course density.

3.9 COMPACTION

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.
 - 1. Complete compaction before mix temperature cools to 195 deg F.

- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
 - 1. Average Density: 94 percent of reference laboratory density based on AASHTO T 209 and Illinois Modified AASHTO T 166 or "In Place Nuclear Method" according to Illinois Modified ASTM D 2950 but not less than 92 percent nor greater than 96 percent.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Repairs: Remove paved areas that are defective or contaminated with foreign materials and replace with fresh, hot-mix asphalt. Compact by rolling to specified density and surface smoothness.
- G. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- H. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.10 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:
 - 1. Base Course: Plus 1/2 inch, Minus 1/4 inch
 - 2. Surface Course: Plus 1/4 inch, no minus.
- B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
 - 1. Base Course: 1/4 inch.
 - 2. Surface Course: 1/8 inch.
 - 3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

3.11 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.
- B. Allow paving to age for 30 days before starting pavement marking.
- C. Sweep and clean surface to eliminate loose material and dust.
- D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

3.12 WHEEL STOPS

- A. Install wheel stops in bed of adhesive as recommended by manufacturer.
- B. Securely attach wheel stops to pavement with not less than two galvanized-steel dowels embedded at one-quarter to one-third points. Securely install dowels into pavement and bond to wheel stop. Recess head of dowel beneath top of wheel stop.

3.13 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Thickness: In-place compacted thickness of hot-mix asphalt courses will be determined according to ASTM D 3549.
- C. Surface Smoothness: Finished surface of each hot-mix asphalt course will be tested for compliance with smoothness tolerances.
- D. In-Place Density: Testing agency will take samples of uncompacted paving mixtures and compacted pavement according to AASHTO T 168.
 - 1. Reference maximum theoretical density will be determined by averaging results from four samples of hot-mix asphalt-paving mixture delivered daily to site, prepared according to ASTM D 2041, and compacted according to job-mix specifications.
 - 2. Field density of in-place compacted pavement to be determined by "In Place Nuclear Method" according to Illinois Modified ASTM D 2950 and correlated with ASTM D 1188 or ASTM D 2726.
 - 3. Average Density: 94 percent of reference laboratory density based on AASHTO T 209 and Illinois Modified AASHTO T 166 or "In Place Nuclear Method" according to Illinois Modified ASTM D 2950 but not less than 92 percent nor greater than 96 percent.
- E. Replace and compact hot-mix asphalt where core tests were taken.
- F. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.14 DISPOSAL

- A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.
 - 1. Do not allow milled materials to accumulate on-site.

END OF SECTION 32 12 16

SECTION 32 13 13 - CONCRETE PAVING

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. This Section includes exterior cement concrete pavement for the following:
 - 1. Driveways and roadways.
 - 2. Curbs and gutters.
 - 3. Walkways.
- B. Related Sections include the following:
 - 1. Division 31 Section "Earth Moving" for subgrade preparation, grading, and subbase course.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, and ground granulated blast-furnace slag.

1.4 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixtures: For each concrete pavement mixture. Include alternate mixture designs when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
- C. Field quality-control test reports.
- D. Testing Agency Qualifications: An independent agency qualified according to ASTM C 1077 and ASTM E 329 for testing indicated, as documented according to ASTM E 548.
 - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-01 or an equivalent certification program.
- E. ACI Publications: Comply with ACI 301, "Specification for Structural Concrete," unless modified by requirements in the Contract Documents.
- F. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

1.5 PROJECT CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 - PRODUCTS

2.1 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
 - 1. Use flexible or curved forms for curves with a radius 100 feet or less.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.

2.2 STEEL REINFORCEMENT

- A. Epoxy-Coated Welded Wire Fabric: ASTM A 884, Class A, steel.
- B. Epoxy-Coated Reinforcing Bars: ASTM A 775 or ASTM A 934; with ASTM A 615, Grade 60 deformed bars.
- C. Epoxy-Coated Joint Dowel Bars: ASTM A 775; with ASTM A 615, Grade 60 , plain steel bars.
- D. Epoxy Coated Tie Bars: ASTM A 615/A 615M, Grade 60, deformed.
- E. Hook Bolts: ASTM A 307, Grade A, internally and externally threaded. Design hook-bolt joint assembly to hold coupling against pavement form and in position during concreting operations, and to permit removal without damage to concrete or hook bolt.
- F. Epoxy-Coated Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete, and as follows:
 - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.
 - 2. Use epoxy-coated or other dielectric-polymer-coated wire bar supports.

2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout the Project:
 - 1. Portland Cement: ASTM C 150, Type I, gray, Supplement with the following:
 - a. Fly Ash: ASTM C 618, Class F.
- B. Normal-Weight Aggregates: ASTM C 33 Class 4S, coarse aggregate, uniformly graded. Provide aggregates from a single source.
 - 1. Maximum Coarse-Aggregate Size: 1-1/2" nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M.
- D. Air-Entraining Admixture: ASTM C 260.
- E. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.
 - 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.

2. Retarding Admixture: ASTM C 494/C 494M, Type B.

2.4 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Clear Waterborne Membrane-Forming Curing and Sealing Compound:
 1. ASTM C 309, Type 1, Class A & B.
 2. AASHTO M148, Type 1, Class A & B.
 3. USDA Compliant

2.5 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.
- B. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1752, Polyethylene closed cell joint filler

2.6 WHEEL STOPS

- A. Wheel Stops: Precast, air-entrained concrete, 3500-psi. Provide chamfered corners and drainage slots on underside and holes for anchoring to substrate.
 1. Dowels: Galvanized steel.

2.7 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete determined by either laboratory trial mixes or field experience.
 1. Use a qualified independent testing agency for preparing and reporting proposed concrete mixture designs for the trial batch method.
- B. Proportion mixtures to provide normal-weight concrete with the following properties:
 1. Minimum Compressive Strength (14 Days): 3500 psi.
 2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.32-0.42.
 3. Slump Limit: 3 inches , plus or minus 1 inch.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 1. Air Content: 5 to 8 percent for 1-inch to 1-1/2-inch nominal maximum aggregate size.
- D. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
- E. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
 1. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- F. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 requirements for concrete exposed to deicing chemicals.

- G. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C and ASTM C 1116. Furnish batch certificates for each batch discharged and used in the Work.
 - 1. When air temperature is between 85 deg F and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 45 minutes.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- B. Proof-roll prepared subbase surface below concrete pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding.
 - 1. Completely proof-roll subbase in one direction and repeat in perpendicular direction. Limit vehicle speed to 3 mph.
 - 2. Proof-roll with a loaded 10-wheel tandem-axle dump truck weighing not less than 15 tons.
 - 3. Subbase with soft spots and areas of pumping or rutting exceeding depth of 1 inch require correction according to requirements in Division 31 Section "Earth Moving."
- C. Proceed with concrete pavement operations only after nonconforming conditions have been corrected and subgrade is ready to receive pavement.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.

- D. Install welded wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.
- E. Epoxy-Coated Reinforcement: Use epoxy-coated steel wire ties to fasten epoxy-coated reinforcement. Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D 3963/D 3963M.
- F. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities, or replace units as required before placement. Set mats for a minimum 2-inch overlap of adjacent mats.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.
 - 1. When joining existing pavement, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour unless pavement terminates at isolation joints.
 - 1. Continue steel reinforcement across construction joints, unless otherwise indicated. Do not continue reinforcement through sides of pavement strips, unless otherwise indicated.
 - 2. Provide tie bars at sides of pavement strips where indicated.
 - 3. Butt Joints: Use **bonding agent** at joint locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
 - 4. Keyed Joints: Provide preformed keyway-section forms or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
 - 5. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt-coat one-half of dowel length to prevent concrete bonding to one side of joint.
- C. Isolation/Expansion Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.
 - 1. Locate expansion joints at intervals of 50 feet, unless otherwise indicated.
 - 2. Extend joint fillers full width and depth of joint.
 - 3. Terminate joint filler not less than 1/2 inch or more than 3/4 inch below finished surface if joint sealant is indicated.
 - 4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
 - 5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 - 6. Protect top edge of joint filler during concrete placement with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness.
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover marks on concrete surfaces.

3.6 CONCRETE PLACEMENT

- A. Inspection: Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast in. Notify other trades to permit installation of their work.
- B. Remove snow, ice, or frost from subbase surface and reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- E. Do not add water to concrete during delivery or at Project site.
- F. Do not add water to fresh concrete after testing.
- G. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- H. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
 - 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.
- I. Screed pavement surfaces with a straightedge and strike off.
- J. Commence initial floating using bull floats or darbies to impart an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- K. When adjoining pavement lanes are placed in separate pours, do not operate equipment on concrete until pavement has attained 85 percent of its 28-day compressive strength.
- L. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 - 1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 75 deg F at point of placement.
 - 2. Do not use frozen materials or materials containing ice or snow.
 - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mix designs.
- M. Hot-Weather Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.

2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.7 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
 1. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

3.8 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
 1. Moist Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 3. Curing and Sealing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.9 PAVEMENT TOLERANCES

- A. Comply with tolerances of ACI 117 and as follows:
 1. Elevation: 1/4 inch.
 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 3. Surface: Gap below 10-foot-long, unlevelled straightedge not to exceed 1/4 inch.

4. Lateral Alignment and Spacing of Tie Bars and Dowels: 1 inch.
5. Vertical Alignment of Tie Bars and Dowels: 1/4 inch.
6. Alignment of Tie-Bar End Relative to Line Perpendicular to Pavement Edge: 1/2 in.
7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Pavement Edge: Length of dowel 1/4 inch per 12 inches.
8. Joint Spacing: 3 inches.
9. Contraction Joint Depth: Plus 1/4 inch, no minus.
10. Joint Width: Plus 1/8 inch, no minus.

3.10 WHEEL STOPS

- A. Securely attach wheel stops into pavement with not less than two galvanized steel dowels embedded in holes drilled or cast into wheel stops at one-quarter to one-third points. Firmly bond each dowel to wheel stop and to pavement. Securely install dowels into pavement and bond to wheel stop. Recess head of dowel beneath top of wheel stop.

3.11 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 1. Testing Frequency: Obtain at least 1 composite sample for each **100 cu. Yd.** or fraction thereof of each concrete mix placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 2. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mix. Perform additional tests when concrete consistency appears to change.
 3. Air Content: ASTM C 231, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mix.
 4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
 5. Compression Test Specimens: ASTM C 31; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
 6. Compressive-Strength Tests: ASTM C 39/C 39M; test 1 specimen at 7 days and 2 specimens at 28 days.
 - a. A compressive-strength test shall be the average compressive strength from 2 specimens obtained from same composite sample and tested at 28 days.
- C. Strength of each concrete mix will be satisfactory if average of any 3 consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 300 psi.
- D. Test results shall be reported in writing to Owner, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Owner but will not be used as sole basis for approval or rejection of concrete.

- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Owner.
- G. Remove and replace concrete pavement where test results indicate that it does not comply with specified requirements.
- H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.12 REPAIRS AND PROTECTION

- A. Remove and replace concrete pavement that is broken, damaged, or defective or that does not comply with requirements in this Section.
 - 1. Remove and replace concrete that is discolored or non-uniform in color.
- B. Drill test cores, where directed by Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory pavement areas with portland cement concrete bonded to pavement with epoxy adhesive.
- C. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 32 13 13

SECTION 33 41 00 - STORM UTILITY DRAINAGE PIPING

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 gravity-flow, non-pressure storm drainage outside the building.
- B. Related Sections include the following:
 - 1. Division 15 Sections.

1.3 DEFINITIONS

- A. PVC: Polyvinyl chloride plastic

1.4 PERFORMANCE REQUIREMENTS

- A. Gravity-Flow, Nonpressure, Drainage-Piping Pressure Ratings: At least equal to system test pressure.

1.5 SUBMITTALS

- A. Product Data: For the following:
 - 1. Piping materials.
- B. Field Test Reports: Indicate and interpret test results for compliance with performance requirements.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Do not store plastic structures, pipe, and fittings in direct sunlight.
- B. Protect pipe, pipe fittings, and seals from dirt and damage.
- C. Handle precast concrete manholes and other structures according to manufacturer's written rigging instructions.

1.7 PROJECT CONDITIONS

- A. Site Information: Perform site survey and verify existing utility locations.
- B. Locate existing structures and piping to be closed and abandoned.
- C. Existing Storm Drainage Service: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Owner no fewer than two days in advance of proposed interruption of service.
 - 2. Do not proceed with utility interruptions without Architect's written permission.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with the requirements of the Drawings and Authorities Having Jurisdiction.

2.2 PIPES AND FITTINGS

- A. PVC Sewer Pipe and Fittings:
 - 1. PVC Sewer Pipe and Fittings, 15" and Smaller: ASTM D 3034, SDR 26, gasketed joints.
 - a. Gaskets: ASTM F 477, elastomeric seals.

2.3 PERFORATED-WALL PIPES AND FITTINGS

- A. Perforated PVC Sewer Pipe and Fittings: AASHTO M 278, bell-and-spigot ends.

2.4 SPECIAL PIPE COUPLINGS AND FITTINGS

- A. Comply with ASTM C 1173, elastomeric, sleeve-type, reducing or transition coupling, for joining underground nonpressure piping. Include ends of same sizes as piping to be joined, and corrosion-resistant-metal tension band and tightening mechanism on each end.
- B. Sleeve Materials: ASTM C 1173, rubber or elastomeric sleeve and band assembly fabricated to mate with OD of pipes to be joined, for nonpressure joints.
 - 1. Sleeve Material for Plastic Pipe: ASTM F 477, elastomeric seal.
 - 2. Sleeve Material for Dissimilar Pipe: Compatible with pipe materials being joined.
- C. Shielded Couplings: ASTM C 1277 assembly of metal shield or housing, corrosion-resistant fasteners, and rubber sleeve with integral, center pipe stop.
 - 1. Heavy-Duty, Shielded, Stainless-Steel Couplings, 10-inch and Smaller: With ASTM A 666, Type 301 or Type 304, stainless-steel shield; 2 or more stainless-steel bands and tightening devices; and ASTM C 564, rubber sleeve.
 - 2. Heavy-Duty, Shielded, Stainless-Steel Couplings, 12-inch and 15-inch: With ASTM A 666, Type 301 or Type 304, stainless-steel shield; stainless-steel bands and tightening devices; and ASTM C 564, rubber sleeve.
- D. Unshielded Flexible Couplings: Elastomeric sleeve with stainless steel tension band and tightening mechanism on each end.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavating, trenching, and backfilling are specified in Division 2 Section "Earthwork."

3.2 PIPING APPLICATIONS

- A. Refer to Part 2 of this Section for detailed specifications for pipe and fitting products listed below. Use pipe, fittings, and joining methods according to applications indicated.

3.3 INSTALLATION, GENERAL

- A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take design considerations into account. Install piping as indicated, to extent practical.
- B. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions for use of lubricants, cements, and other installation requirements. Maintain swab or drag in line, and pull past each joint as it is completed.
- C. Use manholes for changes in direction, unless fittings are indicated. Use fittings for branch connections, unless direct tap into existing sewer is indicated.
- D. Use proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.
- E. Install gravity-flow piping and connect to building's storm drains, of sizes and in locations indicated. Terminate piping as indicated.
- F. Extend storm drainage piping and connect to building's storm drains, of sizes and in locations indicated. Terminate piping as indicated.

3.4 PIPE JOINT CONSTRUCTION AND INSTALLATION

- A. General: Join and install pipe and fittings according to installations indicated.
- B. PVC Sewer Pipe and Fittings:
 - 1. Join pipe and gasketed fittings with gaskets according to ASTM D 2321.
- C. Join piping made of different materials or dimensions with couplings made for this application. Use couplings that are compatible with and that fit both systems' materials and dimensions.

3.5 TAP CONNECTIONS

- A. Make connections to existing piping and underground structures so finished Work complies as nearly as practical with requirements specified for new Work.
- B. Use commercially manufactured wye fittings for piping branch connections. Remove section of existing pipe; install wye fitting into existing piping; and encase entire wye fitting, plus 6-inch overlap, with not less than 6 inches of concrete with 28-day compressive strength of 3000 psi.
- C. Make branch connections from side into existing piping, 21-inch or larger, or to underground structures by cutting opening into existing unit large enough to allow 3 inches of concrete to be packed around entering connection. Cut end of connection pipe passing through pipe or structure wall to conform to shape of and be flush with inside wall, unless otherwise indicated. On outside of pipe or structure wall, encase entering connection in 12 inches of concrete for minimum length of 12 inches to provide additional support of collar from connection to undisturbed ground.
 - 1. Use concrete that will attain minimum 28-day compressive strength of 3000 psi, unless otherwise indicated.
- D. Protect existing piping and structures to prevent concrete or debris from entering while making tap connections. Remove debris or other extraneous material that may accumulate.

3.6 FIELD QUALITY CONTROL

- A. Clear interior of piping and structures of dirt and superfluous material as work progresses. Maintain swab or drag in piping, and pull past each joint as it is completed.
 - 1. In large, accessible piping, brushes and brooms may be used for cleaning.
 - 2. Place plug in end of incomplete piping at end of day and when work stops.
 - 3. Flush piping between manholes and other structures to remove collected debris, if required by authorities having jurisdiction.

- B. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.
 - 1. Submit separate reports for each system inspection.
 - 2. Defects requiring correction include the following:
 - a. Alignment: Less than full diameter of inside of pipe is visible between structures.
 - b. Deflection: Flexible piping with deflection that prevents passage of ball or cylinder of size not less than 92.5 percent of piping diameter.
 - c. Crushed, broken, cracked, or otherwise damaged piping.
 - d. Infiltration: Water leakage into piping.
 - e. Exfiltration: Water leakage from or around piping.
 - 3. Replace defective piping using new materials, and repeat inspections until defects are within allowances specified.
 - 4. Reinspect and repeat procedure until results are satisfactory.

- C. Test new piping systems, and parts of existing systems that have been altered, extended, or repaired, for leaks and defects.
 - 1. Do not enclose, cover, or put into service before inspection and approval.
 - 2. Test completed piping systems according to authorities having jurisdiction.
 - 3. Schedule tests and inspections by authorities having jurisdiction with at least 24 hours' advance notice.
 - 4. Submit separate reports for each test.
 - 5. Replace leaking piping using new materials, and repeat testing until leakage is within allowances specified.

3.7 CLEANING

- A. Clean interior of piping of dirt and superfluous materials.

END OF SECTION 33 41 00