NEW & REPLACEMENT CONCRETE VARIOUS LOCATIONS – NORTH PENN SCHOOL DISTRICT

1. Intent of Bid Specifications

The North Penn School District solicits bids for new and replacement concrete requirements for 2019-2020. Work on the proposed projects will be done as required for the period from July 1, 2019 through June 30, 2020. Each bid will be based on a per square foot or a per lineal foot price for the specified concrete work to be completed. The unit priced concrete could be performed at any of the following North Penn School District facilities: <u>Bids are due by 2:00 pm on Thursday</u> June 13, 2019.

North Penn High School	Bus Garage	Northbridge School
1340 Valley Forge Road	1340 Valley Forge Road	2374 North Penn Road
Lansdale, PA 19446	Lansdale, PA 19446	Hatfield, PA 19440
Pennbrook Middle School	Penndale Middle School	Pennfield Middle School
1201 East Walnut Street	400 Penn Street	726 Forty Foot Road
North Wales, PA 19454	Lansdale, PA 19446	Hatfield, PA 19440
Bridle Path Elementary	Gwyn-Nor Elementary	Gwynedd Square Elem
200 Bridle Path Road	139 East Hancock Road	1641 Supplee Road
Lansdale, PA 19446	North Wales, PA 19454	Lansdale, PA 19446
Hatfield ES	Inglewood Elementary	Knapp Elementary
1701 Fairgrounds Road	1313 Allentown Road	698 Knapp Road
Hatfield, PA 19440	Lansdale, PA 19446	Lansdale, PA 19446
A. M. Kulp Elementary	Montgomery Elementary	General Nash Elementary
801 Cowpath Road	1221 Stump Road	1560 Liberty Bell Drive
Hatfield, PA 19440	North Wales, PA 19454	Harleysville, PA 19438
North Wales Elementary	Oak Park Elementary	Walton Farm Elementary
201 Summit Street	500 Squirrel Lane	1610 Allentown Road
North Wales, PA 19454	Lansdale, PA 19446	Lansdale, PA 19446
York Avenue Elementary	Educational Service Center	Support Services Center
700 York Avenue	401 East Hancock Street	630 West 8 th Street
Lansdale, PA 19446	Lansdale, PA 19446	Lansdale, PA 19446

2. Scope of Work/Specifications

- A. The successful bidder will be required to provide all necessary labor, materials, equipment, supervision and transportation to perform new concrete installations, concrete replacements and concrete curb replacements in accordance with these specifications.
- B. In areas designated by the Facilities Department, all existing concrete shall be removed. All debris including reinforcing wire and broken concrete shall be removed from the job site by the contractor. It is important that sidewalk blocks be removed at expansion or scored joints. Scored joints should be carefully sawed so that the new cast-in-place concrete establishes a smooth transition to existing sidewalks and curbs.

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- C. All voids or soil erosion found after removal of deteriorated concrete must be filled in with No. 2A crushed stone and compacted to provide a firm foundation for the new concrete.
- D. All forms used shall be of a uniform width for sidewalks. All sidewalks shall be the same width as existing. Provide form materials with sufficient stability to withstand pressure of placed concrete without bow or deflection.
- E. Joint fillers for expansion joints shall be asphalt impregnated pre-molded type. Expansion joints required in all areas will be placed prior to pouring. Saw cuts for joints will not be accepted.
- F. Reinforcing wire shall be a minimum of #10 gauge -6" x 6" mesh for all sidewalk replacement. Install welded wire fabric in as long of length as practicable, lapping at least one mesh.
- G. Design mixes shall provide normal weight concrete with the following properties:
 - 4000 PSI 28 day compressive strength
 - W/C ratio 0.58 maximum (non-air entrained)
 - W/C ratio 0.46 maximum (air entrained).
- H. Ready mixed concrete shall comply with requirements of ASTM C94. During hot weather, or under conditions contributing to rapid setting of concrete, a shorter mixing time than specified in ASTM C94 may be required. When air temperature is between 85 degrees F and 90 degrees F, reduce mixing and delivery time from 1 ½ hours to 75 minutes, and when air temperature is above 90 degrees F, reduce mixing and delivery time to 60 minutes. Above time may be increased if a retarding mixture is used.
- I. Mix certificates: Delivery tickets signed by concrete producer and contractor shall be submitted to the owner's representative.
- J. A minimum of 4" of concrete shall be poured in place for all sidewalks. Deposit concrete continuously so that no concrete will be placed on concrete, which has hardened sufficiently to cause the formation of seams or planes of weakness. All pours shall be carried on at such a rate that the concrete will remain loose enough to flow readily into all areas and corners. Reinforcing wire shall be lifted to the center of the 4" thickness.
- K. Soon after screeding and while the concrete is still pliant, the surface is to receive a trowel finish. Immediately, after trowel finishing, slightly roughen the concrete surface by brooming with a fiber bristle broom perpendicular to the main traffic route. Coordinate the required final finish with owner's representative before application.
- L. NOTE: In all areas where replacement concrete abuts against existing concrete sidewalks and curbs, holes shall be drilled 15" on center and 3" deep to accept # 6 rebar, 6 inches in length. This procedure is used throughout the school district to prevent the settling of sidewalks, thus eliminating trip hazards.

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- M. NEW SIDEWALKS: Where new sidewalks are to be installed, the contractor shall excavate to a depth of 8 inches and backfill with 4 inches of 3/4 inch, clean, compacted stone before pouring new concrete.
- N. After forms have been removed from the sidewalks, the existing voids on either side of the new walk shall be backfilled and graded to conform to the existing grades before sidewalks were replaced. Dirt areas shall be seeded with a turf grass seed.
- O. REPLACEMENT CURBING: Where existing curbing is to be removed and replaced, the Contractor shall back-cut macadam to the minimum width necessary to remove curb and shall back-fill after pour with ¾ inch clean stone. Macadam repair will be done by others.
- P. Curbing shall be constructed in ten (10) foot lengths and have the appropriate expansion materials installed according to PennDOT specifications. All curbing shall match existing unless otherwise instructed.
- Q. All concrete shall be protected from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold weather protection and with recommendations in ACI 305R for hot-weather protection during curing.
- R. All new concrete shall be sealed in accordance with sealer manufacturer's written instructions. Maintain continuity of coating and repair damage during curing period.
- S. Contractor shall be responsible for the disposal of all removed concrete, extra dirt, and all detritus by the end of the job.
- T. All work areas must be clearly marked and/or barricaded during this project. Precautions must be taken to ensure pedestrian safety. Any and all damage to other lawn areas must be restored at the conclusion of the project.
- U. The contractor shall guarantee all work for a period of one (1) year from the date of acceptance.
- V. Final square footage totals will be determined by mutual agreement of the contractor and owner's representative.

3. Safety

- A. Safety of students, staff and visitors is paramount in executing this contract. The contractor should never compete with school activities to continue/complete his work. If necessary, this contractor will return to occupied areas after normal working hours.
- B. All work under this contract must follow ALL state and federal environmental rules and regulations.

4. Project Continuance

The District may approve multiple concrete projects during the 2019-2020 school year and this specification and unit costs are to remain in effect from July 1st, 2019 until June 30th, 2020.

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5. Information Contact

Any questions regarding this specification or project work may be referred to:

Scott Kennedy Director of Facilities & Operations North Penn School District 630 W. Eighth St. Lansdale, PA 19446 Tel. 215-853-1140

6. Completing the Sealed Bid

Bid proposals shall be sent to the North Penn School District Support Services Center, 630 W. Eighth St., Lansdale, PA 19446. Attention: Scott Kennedy

All bids shall be clearly marked on the envelope:

"SEALED BID - NEW & REPLACEMENT CONCRETE - 2019-2020"

NOTE: The North Penn School District Board of School Directors reserves the right to award all or any portion of this bid at its sole discretion.

NORTH PENN SCHOOL DISTRICT LANSDALE, PA 19446-3960

BID PROPOSAL FORM

New & Replacement Concrete 2019-2020

We, the undersigned have reviewed the specifications herein for New & Replacement Concrete and propose to furnish all labor, equipment, & materials, where applicable to complete the work strictly in accordance with the attached specifications, terms and conditions as set forth in the attached instruction to bidders.

Date	Telepl	hone Number	Fax Number		
Street Address	City	State	Zip Code		
Name of Compa		Authorized Sign			
We understand that the North Penn School District reserves the right to reject any and all bids and make awards on the basis of contractor qualifications as well as price.					
	Cost per lineal foot:	\$			
Replacement Co	arbing:				
	Cost per square foot:	\$			
New Sidewalks	:				
	Cost per square foot:	\$			
Replacement Si	dewalks:				