



INVITATION TO BID

(This is not an order.)

Buyer: Gregory Hart
216-664-7076
ghart@clevelandohio.gov

Requestor: Lynn Reinke
216-664-3575
LReinke@city.cleveland.oh.us

CITY OF CLEVELAND

Division of Purchases & Supplies
601 Lakeside Avenue
Room 128
Cleveland, OH 44114

Procurement Folder	RFB No.	RFB Description	
150273	RFB 0103 202400000000650	*REBID* ASPHALT PAVING TENNIS COURT (MILL AND FILL)	
RFB Closing Date/Time		Department/Division	Public Bid Opening Date/Time
November 06, 2024 3:00 PM		0103	November 06, 2024 3:00 PM

SCHEDULE OF EVENTS

Event Description			Event Date	
Group/Line#	Commodity Description	Item Quantity/UOM	Service Dates	Catalog Discount
1 / 1	paving		From To	

paving		Vendor Response		
Ship To:		Contract Amount		
Architecture Architecture 601 Lakeside Ave, Room 517 Cleveland, OH 44114		\$		

Vendor Response	Vendor Total Amount for Items	Vendor Total Amount for Services	Payment Discount Offer	
	\$	\$	%	Day(s)

TERMS OF DELIVERY

- Price quoted shall be F.O.B. delivered to the place designated on purchase order. No other terms will be acceptable.
- Delivery quoted must be stated in terms of work days after receipt of the order.
- All charges for shipping must be included within the Unit Price for each item quote unless otherwise designated by a separate line with a specified dollar amount inclusive of all shipping charges.
- No freight charges will be considered nor processed for payment unless apart of the original quote submitted prior to bid award.

BIDDER AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS BELOW AND ON REVERSE SIDE OF THIS BID

Shipping/Freight Charges

ALL CHARGES FOR SHIPPING MUST BE INCLUDED WITHIN THE UNIT PRICE OF EACH QUOTE UNLESS OTHERWISE DESIGNATED BY A SEPARATE LINE ITEM WITH A SPECIFIED DOLLAR AMOUNT INCLUSIVE OF ALL SHIPPING CHARGES.

NO FREIGHT CHARGES WILL BE CONSIDERED NOR PROCESSED FOR PAYMENT UNLESS APART OF THE ORIGINAL QUOTE SUBMITTED PRIOR TO BID AWARD.

Call Buyer Only

Bidders must address all questions to the Buyer (See Above.) Do NOT contact the "Requestor." Contract only the Buyer listed above.

No Price increase

This Purchase Order does not permit price increases.



INVITATION TO BID

(This is not an order.)

Buyer: Gregory Hart
216-664-7076
ghart@clevelandohio.gov

Requestor: Lynn Reinke
216-664-3575
LReinke@city.cleveland.oh.us

CITY OF CLEVELAND

Division of Purchases & Supplies
601 Lakeside Avenue
Room 128
Cleveland, OH 44114

Procurement Folder	RFB No.	RFB Description	
150273	RFB 0103 202400000000650	*REBID* ASPHALT PAVING TENNIS COURT (MILL AND FILL)	
RFB Closing Date/Time		Department/Division	Public Bid Opening Date/Time
November 06, 2024 3:00 PM		0103	November 06, 2024 3:00 PM

BIDDER AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS BELOW AND ON REVERSE SIDE OF THIS BID

Missing information

It is each bidder's individual responsibility to determine for themselves, in advance of bid submission, the accuracy and completeness of any and all information in an RFB. If a potential bidder does not notify the Division of Purchases and Supplies in advance of the bid opening date of any possible discrepancy then any such discrepancy or erratum cannot be the basis for a protest of award. Contact the Buyer immediately if there is a question of accuracy or completeness in these bid documents.

BIDDER MUST COMPLETE & SIGN BELOW

NAME OF THE FIRM:		
STREET ADDRESS:		
CITY:	STATE:	ZIP CODE:
FED ID # / SSN #:		
PHONE NO.:	FAX NO.:	
EMAIL ADDRESS:		
PLEASE PRINT CONTACT NAME:		
AUTHORIZED SIGNATURE:	DATE:	

All bids and related documents must be enclosed in a sealed envelope and marked with the RFB number.

RETURN BID TO: Division of Purchases & Supplies
601 Lakeside Ave
Room 128, City Hall
Cleveland, OH 44114

Effective Immediately: In accordance with Codified Ordinance 181.13 (I) the City shall receive competitive sealed bids through email. All City of Cleveland bids estimated to be less than 50K in value will be submitted and received electronically via email. All bids must be emailed to CityofClevelandbids@clevelandohio.gov. Upon receipt of your bid, you will receive a reply indicating your bid has been received.

Bidder's Instructions

See enclosed Terms & Conditions. Read and follow all terms and conditions of the bid.

Bids must be submitted to CityofClevelandbids@clevelandohio.gov, the Document ID Number and Buyer's Name must be identified in the email subject line. Also clearly state the Document ID Number, Bid Description, Buyer's Name and Closing Date.

Bids received after the Closing Date, Closing Time and sent to any other email address not identified in the Bidders Instruction cannot be considered.

Northern Ireland Affidavit must be completed, signed and included with each bid.

The bid must be submitted to: CityofClevelandbids@Clevelandohio.Gov

Bids received after the Closing Date, Closing Time and sent to any other email address not identified in the Bidders Instruction cannot be considered.

The bid documents must include:

- The Document ID Number and Buyers Name in email subject line
- PDF File of Request For Bid Form
- Terms & Conditions.
- Northern Ireland Affidavit.

Contact the Buyer immediately at the number on the Bid Form if you do not have all the required documents.

TERMS AND CONDITIONS

1. **Acceptance of Purchase Order.** This Purchase Order shall be effective when Seller executes it, otherwise indicates its acceptance, or delivers to the City of Cleveland any of the goods ordered herein or renders for the City any of the services ordered herein. If this Purchase Order has been issued by the City in response to an offer, then the issuance of this Purchase Order by the City shall constitute an acceptance of such offer subject to the express condition that the Seller assent to any additional or different terms contained herein. Any additional or different terms or conditions contained in any acknowledgement of the purchase by the Seller shall automatically be deemed objected to by the City and shall not be binding upon the City unless specifically accepted by the City in writing.
2. **Entire Agreement.** This order, the instructions to bidders, the Request for Bid, the Bid Schedule of Items, and any specification and/or other attachments, if any, incorporated hereby by reference, constitute the entire agreement between the parties and replaces and supersedes any prior or contemporaneous communications, representations, or agreements, whether oral or written with respect to such matter.
3. **Indemnification.** Seller shall indemnify, defend, and hold harmless the City, its officers, agents, and employees from all claims, demands, liabilities, losses, suits, cause of action, judgments, costs, and expenses, including attorneys' fees, arising, occurring, or allegedly arising or occurring from the personal injury, including death, property damage, including loss of use, or otherwise, to any person or the property of any person, including third parties and employees of any party, as a result of negligent or intentional act or omission of Seller or its agents, employees, subSellers or suppliers, in the furnishing of the goods covered by this PO, or because of any imperfection or defect in said goods, or based upon any claim of product liability of strict liability in tort, or because of the failure of such goods to be in accordance with the description of such goods as may appear in any catalog, analytical information report or other technical bulletin as is furnished or used by the City, or because of the failure of such goods to be produced in compliance with the requirements of this PO.
4. **Limit of Liability.** In no event shall the City be liable for anticipated profits, incidental or consequential damages, or penalties of any description. The City's liability on any claim arising out of or connected with or resulting from this contract or from the performance or breach thereof shall in no case exceed the price allocable to the goods or services or unit thereof which gives rise to the claim.
5. **Remedies.** The city's remedies shall be cumulative and remedies herein specified do not exclude any remedies allowed by law or in equity. Waiver of any breach shall not constitute waiver of any other breach of the same or any other provision. Acceptance of any items or payment therefore shall not waive any breach.
6. **Default.** Payment or acceptance of any items after the delivery date shall not constitute a waiver of the City's right to cancel this order with respect to subsequent deliveries. The City reserves the right to reasonable testing and inspection before payment or acceptance. The City's failure to inspect and accept or reject goods, materials, or articles shall not relieve Seller from liability for tender or delivery of nonconforming goods nor constitute a waiver of any of the City's rights or remedies for breach of contract. The City reserves the right to reject any or all items not in conformity with the specifications noted within this purchase order in any respect.
7. **F.O.B. Destination.** Freight terms are F.O.B. Destination, Freight Prepaid, unless otherwise approved in writing by the Commissioner of Purchases and Supplies.
8. **Non-Assignment.** Neither this contract, nor any interest herein, shall be assigned or subcontracted by the Seller except upon the prior written consent of the City.
9. **Patent, Trademark or Copyright Infringement.** Seller agrees to defend, entirely at its own expense, all claims, demands, and actions that may be asserted against the City for all alleged patent, trademark, and/or copyright infringement resulting from the use or resale of goods covered by the PO, and to indemnify and hold the City harmless against all costs, expenses, legal fees, and judgments related to such claims, demands, and actions.
10. **Timing.** Time is of the essence in this contract. Failure to deliver within the time specified shall entitle the City, in addition to any other rights or remedies, to cancel this order and purchase the goods elsewhere, in which event the Seller shall be responsible for any increase in cost.
11. **Implied Warranty.** In addition to its standard warranty, Seller warrants that all goods supplied will be free and clear of all liens and encumbrances, good and merchantable title being in the Seller. Upon receipt by Seller of payment, good and merchantable title will vest in the City. All goods will be free from any defects in design, materials or workmanship and will be of good and merchantable quality. All goods will conform to the City's specifications or the approved sample as the case may be, and will be fit for the known purposes for which purchased, and that Seller will not substitute anything without the City's written consent.
12. **Change Orders.** No changes in the PO, its prices, terms, conditions, length, or attachments are permitted, without the City's prior written approval.
13. **Cancellation.** The City shall have the right to cancel this order, or any undelivered portion of this order, without cause, and its liability for such cancellation shall be limited to Seller's actual cost for work and materials applicable solely to this order that have been expected when Seller receives notice of cancellation. The City may, at its option, cancel this order without liability to Seller (except for conforming shipments the City previously accepted) if Seller (a) ceases to exist, (b) becomes insolvent, (c) becomes the subject of bankruptcy or insolvency proceedings, or (d) commits a breach in the performance of any obligation under this agreement or of any other written agreement with the City of Cleveland.
14. **Compliance with Laws.** Seller shall comply with all federal, state, and local laws, ordinances, rules, and regulations in the manufacture and sale of the goods and performance of the services. Seller shall defend and hold the City harmless from any losses, damages, or costs arising from or caused in any way by Seller's actual or alleged violation of any federal, state, or local law, ordinance, rule or regulation.
15. **Access to Records.** Seller shall provide access to pertinent records relative to this contract/order for a period of three (3) years after the last receipt of payment is made under this contract/order, whichever occurs last.
16. **Material Safety Data Sheets:** Any substance delivered as a part of this order must be properly labeled in accordance with all applicable regulations and must be accompanied by a Material Safety Data sheet (MSDS).
17. **Venue.** Any dispute arising under this order not disposed of by agreement shall be decided by a court of competent jurisdiction in Cuyahoga County in the State of Ohio. Pending settlement on final decision of any dispute, Seller shall proceed diligently with the performance of this order in accordance with the City's direction. The Charter and Ordinance of the City of Cleveland shall govern.
18. **Tax.** Buyer is exempt from Federal and State taxes for tangible personal property. Sellers doing business with the Buyer may not be exempt from paying sales tax to their suppliers for materials to fulfill contractual obligations with the Buyer, nor shall any Seller be authorized to use the Buyer's Tax Exemption number in acquiring such materials, without the prior issuance of a signed Tax Exemption Certificate. A Tax Exemption Certificate is available upon written request.
19. **Documentation.** Seller shall clearly mark all documentation with the applicable valid PO number.
20. **Payment Terms.** Payment will be made in accordance with the terms on the face of this contract, or the Seller's invoice, whichever are more favorable to the City and payment date therefore shall be calculated from the receipt of invoice or receipt or final acceptance of the goods or services, whichever is later. All claims for money due or to become due from the City shall be subject to deduction or setoff by the City by reason of any counterclaim arising out of this or any other transaction with the Seller. The acceptance by the Seller of final payment shall operate as a full and complete release of the City. No payment for goods or services shall constitute acceptance of any defective or nonconforming goods or services by the city. Unless otherwise stated in the PO, the terms of payment shall be net 30 days from the receipt of a proper invoice. It shall be understood that the cash discount period, if any, to the City will date from receipt by the City of acceptable goods and invoice and not from date of invoice.
21. **Insurance.** Unless otherwise stated in the specifications, whenever labor is involved, the Seller shall procure and maintain insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the services, materials, equipment and/or supplies provided to the City. The insurer(s) must be licensed for business in the State of Ohio and maintain an A.M.Best rating of no less than A: VII or be an insurer approved by the City. The Seller shall submit all required insurance certificates to the City before commencing work. The City is to be added to each policy as an additional insured. The Seller shall notify the City in writing at least 30 days before it cancels or reduces its insurance policy or coverage and immediately upon the Company's receipt of notice from the carrier of any cancellation or reduction of the coverage or policy. Seller must demonstrate the following minimum insurance coverage in accordance with the estimated value limits: 1) **Purchases less than \$50,000:** General Liability Insurance, with a \$500,000 combined single limit. 2) **Purchases \$50,000 and over:** General Liability Insurance with bodily injury and property damage limits of \$1,000,000 for each occurrence with a \$2,000,000 general aggregate and \$2,000,000 products and completed operations aggregate. Automobile Liability Insurance must be in effect for any owned, hired and non-owned vehicle used in the performance of the work, with bodily injury limits of \$1,000,000 for each person and \$1,000,000 for each accident, and with property damage limits of \$1,000,000 for each accident; OR \$1,000,000 combined single limits, including bodily injury and property damage. The above limits are the minimum acceptable and do not infer or place a limit on the liability of the Seller. The Seller's insurance shall be primary and any insurance or self-insurance maintained by the City shall be excess for the City and not contribute with the coverage maintained by the Seller.
22. **Workman's Compensation:** Whenever labor is involved, the Seller shall subscribe to and comply with the Workmen's Compensation Laws of the State of Ohio and pay such premiums as may be required there under and to save the City harmless from any and all liability arising from or under said act. He shall also furnish a copy of the official certificate or receipt showing the payments herein referred to before commencing any work.
23. **Authority to Bind.** All parties to this order agrees that the representatives named herein, including in all attachments, possess full and complete authority to bind said parties.
24. **Inspection and Acceptance.** No material received by the City pursuant to the purchase order issued under the terms and conditions of this bid document shall be deemed accepted until the City has had reasonable opportunity to inspect said material. All material which is discovered to be defective or which does not conform to any warranty of the Seller herein, upon initial inspection, or at any later time if the defects contained in the material were not reasonably ascertainable upon the initial inspection, may be returned at the Seller's expense for full credit or replacement. No goods returned as defective shall be replaced without written authorization from the Commissioner of Purchases and Supplies. Such return shall in no way affect the City's discount privileges. Such right to return, offered to the City arising from the City's receipt of defective goods, shall not exclude any other legal, equitable or contractual remedies the City may have therefore.
25. **Non-appropriation of Funds.** As with any other public entity, an Agreement, Contract, or issuance of Purchase Order by the City is contingent upon the legal availability of funding and the allocation of said funds. The City reserves the right to cancel any ongoing Agreement, Contract, or Purchase Order immediately, by giving written notice to the Seller, in the case of a failure by the appropriating body to appropriate funds or funding for the specific project, commodity or service.
26. **Equal Opportunity.** This Agreement is a "contract", and the Seller is a "contractor" within the meaning of Chapter 187 of the Codified Ordinances of Cleveland, Ohio 1976. During the term of this Purchase Order, the Seller shall comply with all terms, conditions and requirements imposed on a "contractor" in the Equal Opportunity Clause, Section 187.22(b) C.O., and herein made a part of this Agreement by reference. A complete copy of the Equal Opportunity Clause is available at the City of Cleveland website.

Subject: Submission of NORTHERN IRELAND FAIR EMPLOYMENT PRACTICES DISCLOSURE

Each bidder and/or appropriate parties should complete the DISCLOSURE and submit it with the bid, if possible. If not submitted with the bid, it must be completed and submitted to the Commissioner of Purchases and Supplies prior to any contract being awarded by the City. If a bidder or appropriate parties fail to complete and submit it, they shall not be eligible for a contract award.

NORTHERN IRELAND FAIR EMPLOYMENT PRACTICES DISCLOSURE

INSTRUCTIONS: Pursuant to Codified Ordinance Sec. 181.36, the information requested on this page must be supplied by all Contractors and any Subcontractors having more than a fifty percent (50%) interest in the proposed contract prior to any contract being awarded by the City of Cleveland. Any Contractor or Subcontractor who is deemed to have made a false statement shall be declared to have acted in default of its contract and shall be subject to the remedies for default contained in its contract. For failure to cure such a default, the Contractor or Subcontractor shall be automatically excluded from bidding for the supply of any goods or services for use by the City for a period of two years.

CHECK WHICHEVER IS APPLICABLE:

A. () The undersigned or any controlling shareholder,* subsidiary, or parent corporation of the undersigned is NOT ENGAGED IN ANY BUSINESS OR TRADING FOR PROFIT IN NORTHERN IRELAND. (If paragraph A. is checked, proceed to the signature line.)

B. () The undersigned or any controlling shareholder,* subsidiary, or parent corporation IS ENGAGED IN ANY BUSINESS OR TRADING FOR PROFIT IN NORTHERN IRELAND. (If paragraph B. is checked, please either check the stipulation contained in paragraph C. or attach documentation that shows that the undersigned has complied with the stipulation contained in paragraph C.

C. () The undersigned and all enterprises identified in paragraph B. are TAKING LAWFUL AND GOOD FAITH STEPS TO ENGAGE IN FAIR EMPLOYMENT PRACTICES WHICH ARE RELEVANT TO THE STANDARDS EMBODIED IN THE "MacBRIDE PRINCIPALS FOR FAIR EMPLOYMENT IN NORTHERN IRELAND." A copy of the MacBride Principles can be obtained from the Office of the Commissioner of Purchases and Supplies. In lieu of checking this paragraph, the undersigned must attach documentation which the undersigned believes shows compliance with the stipulation contained in this paragraph C.

Name of Contractor or Subcontractor
By: _____
Title: _____

*"Controlling shareholder" means any shareholder owning more than fifty percent (50%) of the stock in the corporation or more than twenty-five percent (25%) of the stock in the corporation if no other shareholder owns a larger share of stock in the corporation.

LONNIE BURTEN PARK TENNIS COURT

ASPHALT MILL & FILL REQUIREMENTS

TO BE COMPLETD ACCORDING TO SECTION 32 12 16 – ASPHALT PAVING

PART 1 – DETAILS OF TENNIS COURT

- Recreation Center Location: 2511 E. 46TH Street
- Tennis Court Location: South of Recreation Center along Outhwaite Avenue, between basketball courts and diamond field
- Tennis Court Size: Approximately 10,800 square feet
- Tennis Court Access: Directly from Outhwaite Avenue

PART 2 – MILL

- Mill 2.5” of existing asphalt according to Section 32 12 16 – Asphalt Paving

PART 3 – FILL

- Fill 2.5” of new asphalt according to Section 32 12 16 – Asphalt Paving
- Minimum 1 degree pitch to existing catch basin

PART 4 – TIMING AND OTHER REQUIREMENTS

- **Must be completed in November 2024**
- **Must retain existing electrical conduit located on tennis court**

SECTION 32 12 16 – ASPHALT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Provisions of the Contract, including General and Supplementary General Conditions and Part D - Detail Specification Section, apply to the Work of this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Hot-mix asphalt patching.
 - 2. Hot-mix asphalt paving.
 - 3. Chip Seal binder
 - 4. Joint sealant.
- B. Related Requirements:
 - 1. Section 31 20 00 "Site Grading" for subgrade preparation, fill material, unbound-aggregate subbase and base courses, and aggregate pavement shoulders.
 - 2. Section 32 18 23 Asphalt Tennis and Basketball Courts Surface Repair and Color Coating

1.3 PRE-CONSTRUCTION MEETINGS

- A. Pre-construction Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to hot-mix asphalt paving including, but not limited to, the following:
 - a. Review proposed sources of paving materials, including capabilities and location of plant that will manufacture hot-mix asphalt.
 - b. Review requirements for protecting paving work, including restriction of traffic during installation period and for remainder of construction period.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include technical data and tested physical and performance properties.
 - 2. Job-Mix Designs: Certification, by authorities having jurisdiction, of approval of each job mix proposed for the Work.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer and testing agency.
- B. Material Certificates: For each paving material.
- C. Material Test Reports: For each paving material, by a qualified testing agency.
- D. Field quality-control reports.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by authorities having jurisdiction or the DOT of state in which Project is located.
- B. Testing Agency Qualifications: Qualified according to ASTM D 3666 for testing indicated.

1.7 FIELD CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
 - 1. Prime Coat: Minimum surface temperature of 60 degrees F.
 - 2. Chip and Seal: Minimum surface temperature of 60 degrees F.
 - 3. Asphalt Intermediate Course: Minimum surface temperature of 40 degrees F and rising at time of placement.
 - 4. Asphalt Surface Course: Minimum surface temperature of 60 degrees F at time of placement.

PART 2 - PRODUCTS

2.1 AGGREGATES

- A. General: Use materials and gradations that have performed satisfactorily in previous installations.
- B. Coarse Aggregate: ASTM D 692/D 692M, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.
- C. Fine Aggregate: ASTM D 1073, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.
 - 1. For hot-mix asphalt, limit natural sand to a maximum of 20 percent by weight of the total aggregate mass.

2.2 ASPHALT AND COURT SURFACING MATERIALS

- A. Asphaltic Surface Wearing Course: ODOT Item #448
- B. Asphalt Concrete Intermediate Course ODOT Item #448, Type 1, PG 64-22, Medium Traffic Design, except that use of reclaimed bituminous aggregate pavement and/or base shall not exceed 10% of the total amount, and slag products are not permitted.
- C. Prime Coat: ODOT Item #408.
- D. PreSeal Coat: ODOT Item #423.
- E. Chip and Seal: ODOT #422. Asphalt binder w/ #8 limestone aggregate.
- F. Water: Potable.

2.3 AUXILIARY MATERIALS

- A. Herbicide: Commercial chemical for weed control, registered by the EPA, and not classified as "restricted use" for locations and conditions of application. Provide in granular, liquid, or wet-able powder form.
- B. Sand: ASTM D 1073, Grade No. 2 or No. 3.
- C. Joint Sealant (Gutter Sealant): ODOT 705.04, hot-applied, single-component, polymer-modified bituminous sealant.

2.4 MIXES

- A. Hot-Mix Asphalt: Dense, hot-laid, hot-mix asphalt plant mixes approved by authorities having jurisdiction and complying with the following requirements:
 - 1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
 - 2. Leveling Course: ODOT Item #441, Type 2, PG 64-22.
 - 3. Surface Course: ODOT Item #441, Type 1, PG 64-22.

2.5 CHIP AND SEAL

- A. ODOT Item # 422.00
 - 1. Asphalt binder conforming to ODOT #702.01
 - 2. Limestone #8 course aggregate as specified on plan.
- B. ODOT Item #423.00 Crack filler and Sealing of all milled areas per ODOT 423 Type II prior to Chip and seal .

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that subgrade is dry and in suitable condition to begin paving.
- B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first 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. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Geotechnical Engineer, and replace with compacted backfill or fill as directed.
- C. Proceed with paving only after unsatisfactory conditions have been corrected.

3.2 PATCHING

- A. Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Re-compact existing un-

bound-aggregate base course to form new subgrade.

- B. Tack Coat: Before placing patch material, apply tack coat uniformly to vertical asphalt surfaces abutting the patch. Apply at a rate of 0.05 to 0.15 gal./sq. yd.
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- C. Placing Patch Material: Partially fill excavated pavements with hot-mix asphalt intermediate mix and, while still hot, compact. Cover asphalt intermediate course with compacted, hot-mix surface layer finished flush with adjacent surfaces in order to achieve grades on Grading Plans.

3.3 REPAIRS

- A. Leveling Course: Install and compact leveling course consisting of hot-mix asphalt surface course to level sags and fill depressions deeper than 1 inch in existing pavements.
 - 1. Install leveling wedges in compacted lifts not exceeding 3 inches thick.

3.4 SURFACE PREPARATION

- A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.
- B. Mill paving to thickness specified in details on plan sheets.
- C. Herbicide Treatment: Apply herbicide according to manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted-aggregate base before applying paving materials.
- D. Prime Coat: Apply uniformly over surface of compacted unbound-aggregate base course at a rate of 0.15 to 0.50 gal./sq. yd. Apply enough material to penetrate and seal, but not flood, surface. Allow prime coat to cure.
 - 1. If prime coat is not entirely absorbed within 24 hours after application, spread sand over surface to blot excess asphalt. Use enough sand to prevent pickup under traffic. Remove loose sand by sweeping before pavement is placed and after volatiles have evaporated.
 - 2. Protect primed substrate from damage until ready to receive paving.
- E. Chip and Seal aggregate. Place #8 limestone in accordance of ODOT #422.
- F. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd.
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.5 PLACING HOT-MIX ASPHALT

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike

- off. Place asphalt mix by hand in 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. Place hot-mix asphalt surface course in single lift.
 3. Spread mix at a minimum temperature of 250 degrees F.
 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. Overlap mix placement about 1 to 1-1/2 inches from strip to strip to ensure proper compaction of mix along longitudinal joints.
 2. 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.

3.6 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.
 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 using either "bulkhead" or "papered" method according to AI MS-22, 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.

3.7 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 185 degrees 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: 96 percent of reference laboratory density according to ASTM D 6927, but not less than 94 percent or greater than 100 percent.
 2. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent or 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.

3.8 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:
1. Base Course: Plus or minus 1/2 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.

3.9 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 ASTM D 979.
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. In-place density of compacted pavement will be determined by testing core samples according to ASTM D 1188 or ASTM D 2726.
 - a. One core sample will be taken for every 1000 sq. yd. or less of installed pavement, with no fewer than three cores taken.
 - b. Field density of in-place compacted pavement may also be determined by nuclear method according to ASTM D 2950 and correlated with ASTM D 1188 or ASTM D 2726.
- 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.

3.10 INSTALLATION OF JOINT SEALANTS

- A. Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.
- B. Joint-Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions.
- C. Joint-Sealant Application: Joints between concrete and asphalt paving.
 1. Joint Location:
 - a. Joints between concrete and asphalt paving.
 - b. Joints between concrete curbs and asphalt paving.
 - c. Other joints as indicated.
 2. Joint Sealant: Hot-applied, single-component joint sealant.
 3. Joint-Sealant Color: Black.
 4. Joint Width: 3 inches, plus or minus 1/2 inch.

3.11 PROTECTION

- A. Maintain asphalt paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

3.12 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

**THIS PAGE
HAS BEEN
INTENTIONALLY
LEFT BLANK.**