



PROPOSAL AND CONTRACT ( WHEN EXECUTED )

INSTRUCTIONS ON PAGE 4

THIS PROPOSAL INCLUDES INSTRUCTIONS TO BIDDERS

A. DEPOSIT OF PROPOSALS.

All envelopes containing Bid proposals shall be clearly marked "Bid Proposal for letting of 5/07/2024 Paving ." DATE

Dover Township, 2nd Class MUNICIPALITY (NAME & TYPE)

Brooke Scarce SECRETARY

Sealed Proposals will be received on or before 10:00 A.M. on the above Letting Date. TIME

2480 West Canal Road Dover, PA 17315 ADDRESS

Bids will be opened and read at approximately 10:00 A.M. , on the above Letting Date. TIME

PROPOSALS MUST BE MAILED OR OTHERWISE DELIVERED TO THE ABOVE ADDRESS.

- 1 The contractor proposes to furnish and deliver all materials ( including Form CS-4171, CERTIFICATE OF COMPLIANCE and/ or TR-465 DAILY BITUMINOUS MIXTURE CERTIFICATION ) and to do and perform all work on the following project as more specifically set forth in the Schedule of Prices (Attachment), in accordance with drawings and specifications on file at Dover Township, 2nd Class as well as the supplements and special requirements contained herein and/ or attached hereto and current PennDOT Specifications (Publication 408), except (a) bidders need not be prequalified by PennDOT (Sec.102.01), and (b) Volumetric testing of bituminous paving materials is not required (Sec. 409).
2 If designated as the successful bidder, the contractor will begin work on the date specified in the notice to proceed, or as otherwise provided in the special requirements, and will complete all work within see attachment 1-A calendar days.
3 Accompanying this proposal is a certified check or bid bond in the amount of 10% made payable to the municipality as a proposal guarantee which, it is understood, will be forfeited in case the contractor fails to comply with the requirements of the proposal.

B. PROPOSAL OF:

Three horizontal lines for contractor information

NAME / ADDRESS OF CONTRACTOR

CONTRACTORS CERTIFICATION

It is hereby certified as follows:

- 1 The only person interested in the proposal as principal (s) is (are):
2 None of the above persons are employees of the municipality.
3 This proposal is made without collusion with any other person, firm or corporation.
4 All plans and specifications referred to above and the site of the work have been examined by the contractor. The contractor understands that the quantities indicated herein are approximate and are subject to change as may be required; and that all work is payable on the basis of the unit price listed on the Schedule of Prices. (Attachment 1).

- 5 The contractor will comply with all requirements of the laws and implementing regulations of the Commonwealth of Pennsylvania and the United States relating to human relations, equal opportunity and non-discrimination in employment, and will pay to workmen employed in the performance of the contract the wages to which they may be entitled.
  
- 6 The contractor will provide the municipality with a performance bond, conditioned upon the faithful performance of the contract in accordance with the plans, specifications and conditions thereof, and a payment bond, conditioned on the prompt payment of all material furnished and labor supplied or performed in the prosecution of the work, in accordance with the Public Works Contractors' Bond Law of 1967; and an affidavit accepting the provisions of the Workmen's Compensation Act of 1915, as amended.

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**CONTRACTOR**

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
          TITLE:

WITNESSED OR ATTESTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
  TITLE:

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**TO BE EXECUTED ONLY IN THE EVENT THE ABOVE PROPOSAL IS ACCEPTED**

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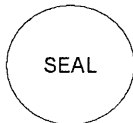
ACCEPTED ON : \_\_\_\_\_  
  DATE

Dover Township, 2nd Class  
MUNICIPALITY

BY: \_\_\_\_\_  
          TITLE:

BY: \_\_\_\_\_  
          TITLE:

BY: \_\_\_\_\_  
          TITLE:



ATTESTED BY: \_\_\_\_\_  
  TITLE:



**ATTACHMENT 1**

**TO MS - 944 ( PROPOSAL AND CONTRACT MS - 944 )**

County: York

Municipality: Dover Township, 2nd Class

Project Number: 24-66205-001

**LOCATION OF WORK:**

Items 1A-1F Pinchtown Rd. (T478) +/- 4060' X 18' wide from West Canal Rd. (SR 4002) to just east of 4970 Pinchtown Rd. (T478). 76°54'16"W 39°58'20"N to 76°53'44"W 39°57'54"N

**DESCRIPTION OF WORK:**

See Attachment 1-A & B for a detailed description of each item. This work is subject to the provisions of the Pennsylvania Prevailing Wage Act. Pennsylvania Prevailing Wage Serial Number is 24-01411.

**ESCALATOR CLAUSE:( if adopted by Municipality.)**

Resolution 2024-12 (Attached) was adopted by the Dover Board of Supervisors on February 26, 2024, as required by PennDOT Chapter 449.6. and an escalator clause applies to this contract. The April 2024 Price Index for PennDOT District 8 is \$598.00

THIS PORTION TO BE COMPLETED BY THE MUNICIPALITY

**SCHEDULE OF PRICES**

1 Item No.	2 Approximate Quantities	3 Unit	4 *Description	5 Unit Price	6 Total
1A	1,822	S.Y.	Mill along edge of road, contractor to remove topsoil & unstable soils by milling 24" wide X 9" deep. Backfill with Township supplied aggregate for a compacted 20' wide area for FDR. The Township will load contractors truck at 2480 W. Canal Rd. If more aggregate is needed, the Township shall supply 2A aggregate. Contractor will haul the aggregate from the quarry to the jobsite "Pinchtown Road" and backfill for a compacted 20' area for FDR.		
1B	9,111	S.Y.	FDR 12" Deep		
1C	445	S.Y.	FDR Greater than 12" Deep		
1D	275	Ton	Portland Cement		
1E	1,416	Ton	25 mm Binder Course		
1F	738	Ton	9mm Wearing Course		

**\* DESCRIPTION:**

Must include ADT on wearing surfaces  
 USE OF CUTBACK ASPHALT IS PROHIBITED  
 BETWEEN MAY 1st AND OCTOBER 31st, EXCEPT AS NOTED IN BULLETIN NO. 25.  
 FOR OPTION OR PHASE BIDS THE TOTALS FOR EACH MUST BE INCLUDED.

SUBTOTAL	
SUBTOTAL FROM OTHER ATTACHMENTS	
BID TOTAL FOR A NON OPTION / PHASE BID	
OPTION 1 OR PHASE 1 BID TOTAL	
OPTION 2 OR PHASE 2 BID TOTAL	
OPTION 3 OR PHASE 3 BID TOTAL	

DOVER TOWNSHIP  
YORK COUNTY, PENNSYLVANIA

**RESOLUTION 2024-12**

***A RESOLUTION AUTHORIZING A PRICE CHANGE ADJUSTMENT OF ASPHALT  
MATERIALS FOR SMALL QUANTITIES***

**WHEREAS**, 67 Pa. Code §449.6 authorizes a municipality by resolution to insert an escalator clause in a bid proposal to provide that the price of materials and equipment will increase or decrease over the bid price if and when the cost to the contractor of the materials and equipment increases or decreases as a result of a general price increase or decrease by the supplier of the contractor and in an amount directly related to such increase or decrease.

**WHEREAS**, the Board of Supervisors, Dover Township, York County will allow an escalator clause for bituminous material to be included as part of the bid proposals for 2024 paving and asphalt seal coat projects. The escalator clause will follow the Pennsylvania Department of Transportation Publication 408 current edition Section 110.04 with the following exceptions:

1. Section 110.04 (a): Delete "100 tons of asphalt cement". Price adjustment of bituminous material will be applicable to all quantities of asphalt cement, including asphalt cement residue contained in emulsions or cutbacks, will be used in the bituminous materials specified or indicated for placement.

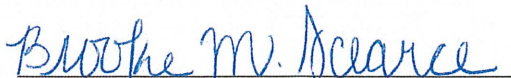
2. Section 110.04(b): Delete "Cumulative price adjustment amounting to less than \$500.00 will be disregarded." Bituminous price adjustment will be calculated for any payment or rebate.

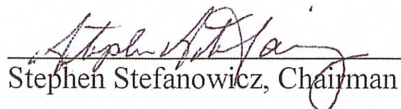
**NOW, THEREFORE**, Be it resolved, and it is hereby resolved by the Board of Supervisors of Dover Township as follows:

RESOLVED, this 26<sup>th</sup> day of February, 2024.

**ATTEST:**

**DOVER TOWNSHIP  
BOARD OF SUPERVISORS**

  
Brooke M. Scarce, Township Secretary

  
Stephen Stefanowicz, Chairman

**SPECIAL PROVISIONS TO CONTRACT MS-944 ( Attachment 1-A )  
CONTAINS IMPORTANT INFORMATION FOR THE CONTRACTOR**

**The Prime Contractor and subcontractors must comply with all of the following provisions  
that are marked with an "X".**

- X Traffic Control and Safety Devices to be provided by the Contractor.  
( Maintenance and Protection of Traffic to comply with current MUTCD, Publication 212 and Publication 213.)
- X Delivery tickets for all materials.
- X CS-4171 Certificate of Compliance and/ or TR-465 Daily Bituminous Mixture Certification required for all materials.
- X Notify the Municipality 5 working days prior to start of project.
- X Work to be completed on or before 10/1/2024 . After 10/1/2024 Liquidated damages apply at  
the rate of \$ 870.00 per calendar day.
- X Roadway to be power broomed by (contractor  municipality ) prior to start of project.
- X Excess material to be removed by (contractor  municipality  .)
- X Municipality to inspect project.
- X Need Bill of Lading for each shipment of bituminous material per Section 702.1(c) of Specifications 408.
- X Tack Coat required per Section 460, or 409 for superpave, of Specifications 408 and is incidental to  
paving item unless noted otherwise.  
Prime Coat required per Section 461 of Specifications 408.
- X Bituminous Seal on all abutting pavement and curbs required.
- X Saw cut or Milled Paving Notch required and incidental to paving item unless noted otherwise.
- X Scratch/ Leveling Courses to be placed at the discretion of appointed inspector(s).  
Full width pavement with one pass required.
- X Municipality reserves the right to limit work completed.  
Taper pavement the last 3 feet to curb.  
For FOB Source bids, hauling distance will determine selection of bid award.  
Municipality reserves the right to procure material which best suits their requirements after all bids and  
items are reviewed.
- X Incidental Preparation and clean up required. ( Project Construction Materials )
- X The municipality reserves the right to make an award on the basis of the aggregate total for all like  
items on which quotations are received.
- X Provide design, which meets Specifications Form 408 to the municipality 5 days prior to start of work.
- X Contractor responsible for defects that occur within one year of applications.  
Contractor required to review proposed project with Municipality's Representative prior to bidding.  
Oil Samples required from each distributor truck by contractor (1) one quart : A.M. & P.M. and  
witnessed by municipality and retained by municipality. (Oil samples must be placed in an  
approved type container that is compatible with oil sample.)  
At least three random stone samples to be taken by contractor on project site witnessed by  
municipality and retained by municipality.  
Complete all testing in accordance with Specification Form 408 Section 409 except for superpave  
volumetric testing.  
Notice to Proceed will be the date of Contract acceptance.
- X Final Completion Certificate & Notice of Completion required.
- X Future award of Contract will be based on quality of work as determined by the municipality.
- X Contractor, notify all residents of pending work to be performed.
- X Notice to Proceed will be 5/14/2024
- X Work shall be completed between 6 A.M. and 6 P.M. Work could be performed on a Saturday.
- X Paved surface tolerance will be tested with a 12' straightedge.
- X Pennsylvania Prevailing Wage Determination Serial Number 24-01411 (7 pages attached).
- X FDR mix design from Geo-Technology Assoc., dated March 1, 2024, is attached (19 pages).
- X CONTINUED ON ATTACHMENT 1-B

**My signature signifies that I have read and understand the above special provisions to this  
contract, and by being authorized by this company to act as their authorized representative, and  
on their behalf hereby agree to adhere to any and all of the provisions pertaining to this contract.**

_____ Contractor's Representative	_____ Date
_____ Company	

_____ Municipality's Representative	_____ Date
Dover Township, 2nd Class	
	_____ Municipality

**2024 PAVING**



**SPECIAL PROVISIONS TO DOVER TOWNSHIP CONTRACT MS-944 (Attachment 1-B)**

**Contains important information for the contractor.**

**The contractor must comply with all the following provisions:**

**ITEM 1A - Pinchtown Rd. - Mill along edge of road,** Contractor to remove topsoil & unstable surface soils by milling 24" wide X 9.0" deep. Backfill with township supplied mixture of road millings and crushed concrete for a compacted area of 20.0' wide area for FDR. If more aggregate is needed, the contractor shall supply and backfill with 2A aggregate for a compacted area of 20.0' wide area for FDR.

**ITEM 1B - Pinchtown Rd. - FDR 12.0" Deep,** Contractor to perform FDR with Portland Cement as per PennDOT Pub. 447, M5-0370- 0035, and Mix Design Report from GTA dated March 1, 2024 (attached 19 pages). The finished shape, grade and compacted surface shall provide for a 2.0% minimum centerline crown.

**ITEM1C - Pinchtown Rd. – FDR Great than 12.0" Deep,** Contractor to perform FDR with Portland Cement as per PennDOT Pub. 447, M5-0370- 0035, and Mix Design Report from GTA dated March 1, 2024 (attached 19 pages). The finished shape, grade and compacted surface shall provide for a 2.0% minimum centerline crown.

**ITEM 1D - Pinchtown Rd. - Portland Cement,** Contractor to furnish, install and mix as per PennDOT Pub. 447, M5-0370-0035 and Mix Design Report from GTA March 1, 2024 (attached 19 pages).

**ITEM 1E - Pinchtown Rd. - 25 mm Binder Course,** Contractor to furnish and install SUPERPAVE asphalt mixture, 25 mm, PG 645-22, Binder, 0 to 0.3 million E5AL's, 5RL L, ADT<IO00, 3.0" compacted thickness with 2.0% minimum centerline crown, 18.0' wide.

**ITEM 1F - Pinchtown Rd. - 9.5 mm Wearing Course,** Contractor to furnish and install SUPERPAVE asphalt mixture, 9.5 mm, PG 645- 22, Wearing, 0 to 0.3 million E5AL's, 5RL L, ADT<IO00, 1.5" compacted thickness with 2.0% minimum centerline crown, 18.0' wide.

**Apply a tack coat prior to wearing course and seal all vertical surfaces and longitudinal joints between each pass.**

**Seal all finished joints with rubberized joint sealing material upon completion of all paving.**

\_\_\_\_\_  
Contractor's Representative Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Company Name

-END-

**PROPOSAL AND CONTRACT INSTRUCTIONS- FORM 944**

- 1 The proposal must be typewritten or printed.
- 2 If more than one proposal on any project is submitted by an individual, firm or partnership, corporation or association under the same or different names, only one lowest proposal will be considered.
- 3 Description of Work- - -
  - A. If additional space is needed, insert appropriately numbered attachment and note "Continued on attached work sheets."
- 4 Part A of Page 1 to be completed by municipality. Part B of Page 1 to be completed by contractor. Schedule of Prices - Column #1 (Item), #2 (Approximate quantities), #3 (Unit, i.e., ton, square yard, linear feet, etc.) And #4 (Description, i.e., bituminous materials - 9.5 mm S & L, 12.5 mm Wearing, 25.0 mm Base Course, etc.) Must be filled in by the municipality to insure equitable bidding. Columns #5 (Unit Price), #6 (Total) and total amount of bid, must be filled in by the contractor. If more space is needed, add note at the bottom of the page; "Continued on Attachment No. 1-A", and add additional sheet designated as Attachment No. 1-A, 1-B, etc.. Repeat for each additional sheet required. As required by Publication 408, Section 102.06(e), each bidder must submit a completed Form 7126 - Anti-Collusion Affidavit with its bid proposal.
- 5 If liquidated damages are to be assessed, add the following sentence to Part A #2. If all work is not completed on time, liquidated damages will be assessed at the rate of \$870.00 per additional working day. (OR "... as set forth in the attached schedule.")
- 6 Payment and Performance bonds are provided only by the successful bidder. Contracts from \$4,000.00 up to \$5,000.00 in Second Class Townships - performance bond must be not less than 10% or greater than 100% of amount of contract. Contracts greater than \$1,500.00 up to \$10,000.00 in First Class Townships, Boroughs and Third Class Cities - bonds must be between 50 % to 100% of the contract amount. Contracts in excess of \$5,000.00 in Second Class Townships and in excess of \$10,000.00 in First Class Townships, Boroughs and Third Class Cities - bonds must be in 100% of the amount of the contract. Bond Forms MS-944 Attachments 2 and 3 and Workmen's Compensation Affidavit - Attachment 4 must be submitted by the successful bidder within 20 days of the contract award. Failure to submit the bonds shall constitute grounds to cancel the contract.
- 7 \*Construction projects, where the estimated cost of the total project exceeds \$25,000, are subject to the provisions of the Pennsylvania Prevailing Wage Act 442. It is the responsibility of the municipality to obtain the Prevailing Wage Scale for the area and include it in the proposal. If the Prevailing Wage Act applies, this fact shall be noted in the advertisement.

On projects utilizing Federal Revenue Sharing Funds, if the project cost exceeds \$2,000 and is financed with 25% or more Federal Revenue Sharing Funds, the Davis Bacon Act applies. Again, it is the responsibility of the municipality to obtain the Davis Bacon Wage Rates, include them in the proposal and note the fact in the advertisement. If both acts are applicable, The Davis Bacon Act has preference over the Pennsylvania Prevailing Wage Act.
- 8 An ESCALATOR CLAUSE is optional; if used, it must be included in the proposal prepared by the municipality. An escalator clause may not be inserted by the contractor.

\*(1961, Aug. 15, P.L. 987; 43 P.S. 165)

**PERFORMANCE BOND  
(With Corporate Surety)**



**KNOW ALL MEN BY THESE PRESENTS, That we,**

\_\_\_\_\_

(NAME AND ADDRESS OF CONTRACTOR)

as Principal and \_\_\_\_\_  
(SURETY COMPANY)

a corporation incorporated under the laws of the State of \_\_\_\_\_ as Surety  
(NAME OF STATE)

are held and firmly bound unto \_\_\_\_\_ in the full and just sum of  
(NAME OF MUNICIPALITY)

(\$ \_\_\_\_\_) dollars

lawful money to the United States of America, to be paid to the above Municipality or its assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the above bounden Principal has entered into a contract with the above Municipality, bearing even date herewith, for the undertaking of certain obligations as therein set forth.

**NOW, THEREFORE**, the condition of this obligation is such that if the above bounden Principal, as Contractor, shall in all respects comply with and faithfully perform the terms and conditions of said Contract, including the Specifications and conditions referred to and made a part thereof, and such alterations as may be made in said Specifications as therein provided, and shall well and truly, and in a manner satisfactory to the municipality fulfill all obligations as therein set forth, then this Obligation shall be void, but otherwise the same shall be and remain in full force, virtue and effect.

It is further provided that any alteration which may be made in the terms of the contractor or its specifications with the express approval of the Municipality or the Principal to the other, shall not in any way release the Principal and the Surety or either or any of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the surety of any such alteration or forbearance being hereby waived.

**IN WITNESS WHEREOF**, the said Principal and Surety have duly executed this Bond under Seal, pursuant to due and legal action authorizing the same to be done on \_\_\_\_\_  
(DATE OF BOND)



**Attest / Witness:**

\_\_\_\_\_  
CONTRACTOR

**BY**

\_\_\_\_\_  
TITLE:

\_\_\_\_\_  
TITLE:



**Attest / Witness:**

\_\_\_\_\_  
SURETY COMPANY

\_\_\_\_\_  
TITLE:

\_\_\_\_\_  
TITLE:





**KNOW ALL MEN BY THESE PRESENTS, that we**

[Empty rectangular box for name]

as PRINCIPAL and \_\_\_\_\_  
a corporation incorporated under the laws of the State of \_\_\_\_\_ as SURETY, are  
held and firmly bond unto the \_\_\_\_\_, in the full and just sum of  
\_\_\_\_\_ (\$ \_\_\_\_\_) dollars, lawful money of the  
United States of America, to be paid to the said \_\_\_\_\_ or its assigns, to which  
payment well and truly to be made, we bind ourselves, our heirs, executors, administrators,  
successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the above bounden Principal has entered into a contract with the above  
municipality hereinafter called Obligee, bearing even date herewith, for the improvement of a  
certain section of highway or bridge in said Municipality consisting of:

\_\_\_\_\_ for approximately the sum of: \_\_\_\_\_ (\$ \_\_\_\_\_) dollars.

**NOW, THEREFORE**, the condition of this obligation is such that if the above bounden  
PRINCIPAL shall and will promptly pay or cause to be paid in full all sums of money which may be  
due by contract or otherwise, to any individual, firm, partnership, association or corporation, for all  
material furnished or labor supplied or performed in the prosecution of the work, whether or not the  
said for material or labor entered into and became component parts of the work and for rental of the  
equipment used and services rendered by public utilities in, or in connection with the prosecution of  
such work, then this obligation to be void, otherwise to remain in full force and effect.

The **PRINCIPAL** and **SURETY**, hereby, jointly and severally, agree with the Obligee herein  
that any individual firm, partnership, association or corporation, which has performed labor or  
furnished material in the prosecution of the work as provided, and any public utility which has not  
been paid in full therefor, may sue in assumpsit on this Payment Bond in his, their, or its own name  
and may prosecute the same to final for such sum or sums as may be justly due him, them or it, and  
have execution thereon. Provided, however, that the Obligee shall not be liable for the payment of  
any costs of expenses of such suit.

**RECOVERY** by any individual, firm, partnership, association or corporation hereunder shall  
be subject to the provisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385,  
approved December 20, 1967, P.L. 869, which Act shall be incorporated herein and made a part  
hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alterations which may be made in the terms of the contract or  
in the work to be done or materials to be furnished or labor to be supplied or performed under it or  
the giving by the Obligee of any extension of time for the performance of the contract or any other  
forebearance on the part of either the Obligee or the Principal to the other, shall not in any way  
release the PRINCIPAL and the SURETY or SURETIES of any such alteration, extension of  
forebearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond  
under seal this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.



WITNESS: \_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
TITLE:

BY: \_\_\_\_\_  
TITLE:



WITNESS: \_\_\_\_\_  
SURETY COMPANY

\_\_\_\_\_  
TITLE:

\_\_\_\_\_  
TITLE:



**AFFIDAVIT RE**

**ACCEPTING PROVISIONS OF THE WORKMEN'S COMPENSATION ACT**

State of \_\_\_\_\_ )  
 )  
 ) ss:  
 )  
County of \_\_\_\_\_ )

being duly sworn according to law deposes and says that they <sup>he has</sup> have  
it has

accepted the provisions of the Workmen's Compensation Act of 1915 of the Commonwealth of Pennsylvania, with  
has his  
its supplements and amendments, and have insured their liability thereunder in accordance with the terms of said  
its

Act with \_\_\_\_\_  
(SURETY COMPANY)

\_\_\_\_\_  
( TYPE OR PRINT) CONTRACTOR

BY \_\_\_\_\_  
SIGNATURE

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_ A.D. 20 \_\_\_\_ .

\_\_\_\_\_  
SIGNATURE

My Commission Expires \_\_\_\_\_ ( DATE )

D-7126 (7-09)

**ANTI-COLLUSION AFFIDAVIT**



County York

Municipality Dover Township, 2nd Class

Project Number 24-66205-001

Fed. Project No. \_\_\_\_\_  
( If Applicable )

State of \_\_\_\_\_

County of \_\_\_\_\_

The undersigned deponent deposes and says that he is the \_\_\_\_\_  
of the \_\_\_\_\_ Company; that he is authorized to make this  
affidavit on behalf of said company in compliance with section 102.06 (e) of Department Specifications,  
Publication 408, as amended and that the said company has not, either directly or indirectly, entered  
into any agreement, participated in any collusion, or otherwise taken any action in restraint of free  
competitive bidding in connection with such contract.

\_\_\_\_\_  
(Contractor)

**BY**

\_\_\_\_\_

**Sworn to and subscribed before me the undersigned notary public this**

\_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

My Commission expires \_\_\_\_\_

CS-4171 (11-09)



# CERTIFICATE OF COMPLIANCE

1. **◆COUNTY:** \_\_\_\_\_ **◆LR/SR:** \_\_\_\_\_ **◆SEC/SEG:** \_\_\_\_\_ **◆ECMS#:** \_\_\_\_\_  
(◆ - To be completed by the party that will ship the material to the project, otherwise leave blank.)

2. I / WE hereby certify that the material listed on line 5 was:

- Manufactured
- Fabricated
- Coated
- Precasted
- Produced

By \_\_\_\_\_ (Name of Manufacturer, Fabricator, Coater, Precaster or Producer) \_\_\_\_\_ (Supplier Code)

3. and the party listed above certifies that the material(s) on line 5 meets the requirements of  
**Publication 408**, Section(s) \_\_\_\_\_  
**AASHTO, ASTM**, Federal or other designation \_\_\_\_\_

4. The material listed below is being shipped to: \_\_\_\_\_ (Company Name)

5. LOT NO.	QUANTITY	APPROVED MATERIAL AS LISTED IN BULLETIN # 14 or 15 BULLETIN # 41 or 42 PRODUCERS, LIST HMA / PCC JMF.

6.  **CHECK HERE IF YOUR PRODUCT CONTAINS IRON OR STEEL** I / WE certify that we received a copy of the Mill Certification Form(s) from the manufacturer(s) of any steel or iron materials contained in our product and all manufacturing processes including coatings application (e.g.. epoxy, galvanizing, or painting) have occurred in the United States and we are maintaining copy(s), in our files in accordance with Section 106.03(b)3. Note: While coating materials themselves are not covered by Buy America, the application of these materials on steel or iron must occur in the United States.

7. **VENDOR CLASSIFICATION (CHECK ONE BLOCK ONLY) -**

<input type="checkbox"/> <b>#1 Manufacturer, Fabricator, Coater, Precaster Listed in Bulletin # 15, or Producer Listed in Bulletin # 14, 41 or 42</b> <i>I certify that the above statements are true and to the best of my knowledge, fairly and accurately describe the product(s) listed.</i>	<input type="checkbox"/> <b>#2 Distributor, Supplier or *Private Label Company Not Listed in Bulletin # 15. Also, complete line 9</b> <i>I certify that the material being supplied is one and the same as provided to us by the manufacturer listed on this document and quantities listed above are accurate.</i>
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8. **NAME (print) :** \_\_\_\_\_ **TITLE:** \_\_\_\_\_  
**COMPANY NAME :** \_\_\_\_\_  
**SIGNATURE :** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
By Responsible Company Official (QC Staff only if you checked block #1 on line 7)

9. List company that sold you the material(s) documented above: \_\_\_\_\_ (Company Name)  
(Complete if you checked Block # 2 on line # 7, otherwise leave blank.)

After completing the Certificate of Compliance form CS-4171, maintain the original at your company's location. A copy of the Certificate of Compliance form must accompany your material shipment to its next destination. Also, if you receive material shipments from other companies related to PennDOT projects, the accompanying Certificate of Compliance forms must be kept on file at your location. These files must be available for inspection and verification by a Department Representative for a period of not less than THREE years from the date of the last shipment.

**\*Private Label Companies must identify the true manufacturer (Line 2) and the approved material (Line 5) as listed in Bulletin # 15.**

MS-NCP



**pennsylvania**  
DEPARTMENT OF TRANSPORTATION

Dover Township, 2nd Class **MUNICIPALITY**

**NOTICE OF COMPLETION**

**IN REFERENCE TO PROJECT # 24-66205-001**

**Name of Contractor** \_\_\_\_\_

**Performance of work as specified on the above numbered contract is completed and final pavement inspection has been made by the contractor and municipality in accordance with the terms of the contract awarded.**

**DATE OF AWARD** \_\_\_\_\_

\_\_\_\_\_  
Signature of Municipality

\_\_\_\_\_  
Signature of Contractor

Both copies of this form to be filled by the Contractor-Municipality on completion of final pavement restoration.

**THIS PORTION TO BE COMPLETED BY MUNICIPALITY**

**FINAL COMPLETION CERTIFICATE**

**By the affixing of my signature I hereby certify that final inspection has been made and all work has been performed in accordance with the above contract # and is hereby accepted by the municipality as completed.**

\_\_\_\_\_  
Authorized Agent for the Municipality

\*DATE \_\_\_\_\_

**\* The contractor is responsible for maintenance of permanent pavement repairs for a period of one year from this date.**

# GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND  
ENVIRONMENTAL CONSULTANTS

*A Practicing Geoprofessional Business Association Member Firm*



March 1, 2024

Dover Township  
2480 West Canal Road  
Dover, Pennsylvania 17315

Attn: Mr. Michael H. Fleming  
Public Works Director

Re: Pavement Reconstruction Services  
***Pinchtown Road FDR Mix Design Report***  
Dover Township, Pennsylvania

Dear Mr. Fleming:

Pursuant to our proposal dated January 21, 2024, Geo-Technology Associates, Inc. (GTA) provided full-depth reclamation (FDR) design services for Pinchtown Road, located in Dover Township, York County, Pennsylvania. The proposed construction on Pinchtown Road begins at the intersection with W. Canal Road and extends southeast for approximately 4,000 feet. These mix designs were performed in general accordance with PennDOT Pub 447.

In consultation with Dover Township, the FDR base will be constructed with Portland cement to a depth of 12 inches and overlaid with 3 inches or more of bituminous pavement. Limited removal of material is expected at the intersection of Canal Road and to tie into the concrete driveway at house #5390. Based on MS-0370-0035, roadways that are constructed with at least 3 inches of bituminous pavement are required to have an FDR compressive strength of 200 to 500 pounds per square inch (psi). This report does not provide a pavement design for specific subgrade and traffic conditions.

## **SITE OBSERVATIONS AND FIELD EXPLORATION**

GTA performed a roadway condition assessment on January 30, 2024, by driving the roadway and observing the general conditions of pavement surface distress. In addition, GTA video documented the condition of the roadway. The observations were recorded for further desktop review.

Pinchtown road is open section (not bounded by curb) and bituminous-surfaced, servicing both farmland and residential properties. Pinchtown Road is a connector road, which appear to experience low traffic volumes. It is apparent that many years of surface overlays (oil & chip), and base repairs have occurred over the life of the road. Overall, drainage of the roadway appears to be lacking, especially on the half of the road closest to W. Canal Road. The

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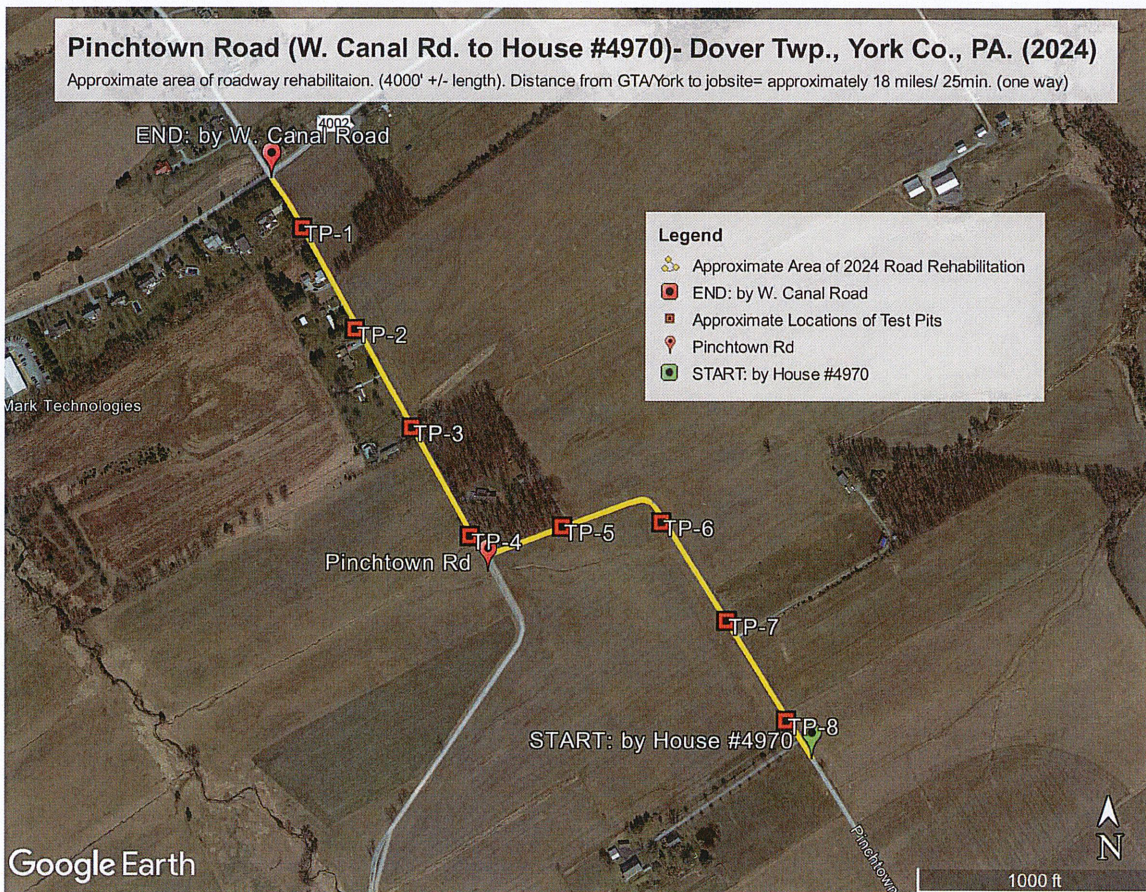
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moderate-severity of rutting and surface distortion and moderate to severe alligator cracking indicates weak pavement subgrade that is exacerbated by poor drainage.

The Township excavated test pits on January 30, 2024 to measure the thickness and composition of the existing pavement and obtain samples for laboratory testing. Personnel from GTA were on site during test pit excavation to document the results. Dynamic Cone Penetration (DCP) tests were performed on the subgrade soils per ASTM D6951 to evaluate the relative consistency and estimated CBR values. The DCP tests results were variable, indicating marginal to high values.

The test pits encountered variable pavement conditions, with the bituminous pavement ranging in thickness from 2 to 11 inches. Some of the bituminous layers appeared to be open graded. Aggregate subbase was only encountered in test pits TP-1 and TP-2 ranging in thickness from 3½ to 8½ inches. During test pit sampling, GTA noted wet conditions and standing water in test pits TP-2, TP-3, and TP-7. Photographs of the test pits are attached to this report. The following is an Exploration Location Plan and a summary of the test pit results:

### EXPLORATION LOCATION PLAN



**SUMMARY OF TEST PITS**

Test Pit No.	Bituminous Pavement Thickness (in.)	Aggregate Type	Aggregate Thickness (in.)	Visual Subgrade Soil Classification	DCP Estimated CBR (%)
TP-1	2	Oily Agg	8½	Sandy Silt	28
TP-2	3	Old degraded asphalt	3½	Sandy Silt	4
TP-3	9	N/A	0	Sandy Silt with Rock Fragments	23
TP-4	6½	N/A	0	Sandy Silt with Rock Fragments	14
TP-5	11	N/A	0	Sandy Silt with Rock Fragments	39
TP-6	10¾	N/A	0	Sandy Silt	28
TP-7	11	N/A	0	Sandy Silt	8
TP-8	10	N/A	0	Sandy Lean Clay with Rock Fragments	14

**LABORATORY TESTING**

Laboratory testing was performed on a composite mixture of roadway materials that represent the final FDR layer of 12 inches. The testing included grain size analysis, Atterberg limits, and moisture density testing in accordance with the Standard Proctor. The results of the testing are shown below and lab reports are included in Appendix B.

**SUMMARY OF LABORATORY TESTING**

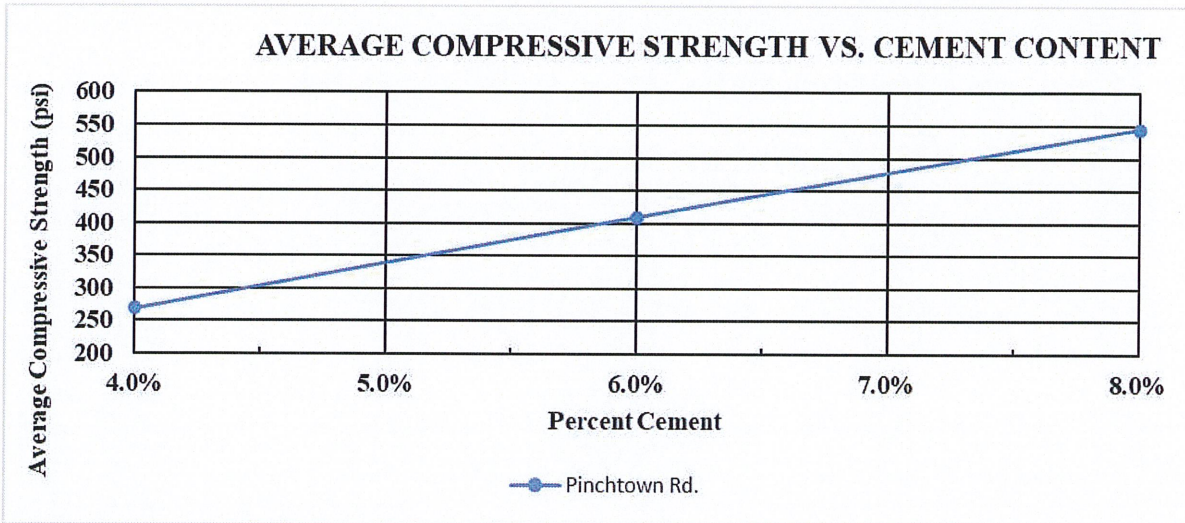
Test Specimen	Approximate Mix Ratio (HMA/Agg /Soil)	Classification USCS/AASHTO	Liquid Limit (%)	Plasticity Index (%)	Max. Dry Density (pcf)	Opt. Moisture Content (%)
Pinchtown Rd. Bulk Composite	42% / 25% / 33%	Well Graded Gravel with Silt and Sand GW-GM / A-1-a	Non-Plastic	Non-Plastic	133.6	7.4

Unconfined compressive strength (UCS) testing was performed on the composite FDR sample after mixing with varying amounts of Type II Portland cement. For the UCS testing, the composite sample was hydrated to about one to two percent above the optimum moisture content. Three sub-samples were then split from each composite sample, and then were mixed with 3 different percentages of Type II Portland cement. For each cement percentage, three, 4-inch diameter, cylindrical specimens were formed using the Standard Proctor effort and allowed to moist cure at room temperature. The samples were subjected to UCS testing at an age of 7 days. The results of the testing are summarized below.



**SUMMARY OF UCS TESTING**

Test Specimen	Percent Portland Cement	Individual UCS (psi)	Average UCS (psi)
Bulk Composite	4%	254, 285, 269	269
	6%	393, 435, 401	410
	8%	522, 568, 544	545



**FDR RECOMMENDATIONS**

The design thickness of new pavement layers generally depends on the type of traffic (volume and vehicle weight), type and strength of the pavement materials, and the stability of the underlying soil. Due to the level of pavement distress, and weak and wet subgrade conditions, a thickness of 12 inches was chosen in consultation with Dover Township. According to PennDOT Pub 447, the FDR layer is required to have a UCS between 200 and 500 psi because there will be 3 or more inches of new pavement. Based on the laboratory testing, the following design is recommended.

**FDR DESIGN SUMMARY**

Road	Pinchtown Road
<b>FDR Thickness</b>	12 inches
<b>Cement Rate</b>	5%
<b>Cement Spread Rate</b>	60 psy
<b>Pulverization</b>	Pulverize to 12-inch depth
<b>Spread/Mix Passes</b>	1 pass minimum

The recommended application rate is based on limited testing on a discrete composite sample. Actual FDR performance will vary depending on the specific soils, moisture and temperature conditions, thickness of pavement section, and contractor care. There will be

inherent differences between strengths derived from controlled laboratory conditions and strengths from variable field construction conditions. Therefore, expect that the strength of field fabricated samples will vary and can be more or less than the average laboratory strengths. The mix design may need to be adjusted if different conditions are encountered during pulverization, particularly if excessive amounts of soil or worst types of soil are incorporated into the mixture.

These recommendations assume that the stabilization is performed during seasonal periods where the soil and air temperatures are above 40 degrees. If the stabilization is to be performed when the soil and/or air temperatures are expected to be 40 degrees within 7 days of construction, GTA should be consulted for cold weather construction measures.

Refer to the attached *Supplemental Cement Stabilization Considerations* for issues that commonly affect the design, construction, and performance of FDR. The following issues are especially important for this project.

- The FDR should extend 1-foot wider than the proposed WMA pavement unless bounded by existing curbing.
- For widening of less than one foot beyond the existing edge of pavement, we recommend removal of topsoil and proceeding with conventional reclaiming.
- For areas where the widening extends more than one foot beyond the existing edge of pavement, we recommend removal of topsoil and unstable surface soils and backfilling with a minimum of 8 inches of dense graded aggregate. The purpose of the additional aggregate is to generate similar FDR strengths to the material in the center of the roadway.
- We recommend pulverizing to the planned FDR depth and reshaping the pulverized material before spreading cement. For a spread rate of less than 80 psy, the cement can be spread and mixed in a single pass. For a spread rate more than 80 psy, the cement should be spread and mixed in two passes. If high plasticity soils are encountered, additional mixing passes may be necessary to adequately mix the soils or to adjust moisture. All mixing passes should be completed within 2 hours. We recommend that water be direct injected.
- The stability of the final FDR layer is contingent on the stability of the underlying subgrade soils. All unstable soils below the FDR will need to be undercut and replaced or chemically treated to a greater depth. Therefore, we recommend proof-rolling the roadway edges prior to performing the FDR. In addition, the subgrade stability should be evaluated during pulverization and cement mixing to identify areas of deep instability that need to be remediated.
- We recommend providing contingency items in the contract for areas that require deeper remediation and areas that require additional cement due to variable mixture conditions.

- Highly weathered rock may be encountered during reclamation. Typically, if the material can be pulverized with the reclaimer then it should be incorporated into the treated layer. If pulverization of the material is difficult, it is likely suitable for support of a thinner stabilized layer. In this case, the reclaimer head should be raised accordingly to only treat material that is pulverized by normal means. The cement application rate can be adjusted accordingly for thinner treatment depths.
- Shrinkage cracking of material treated with cement may occur, especially when higher compressive strengths are targeted. This will create a conduit for water infiltration into the FDR base. This design has been prepared to reduce, but not eliminate, the potential for shrinkage cracking. Industry standards on limiting water in the mixture (within 2% of the optimum moisture content), preventing rapid moisture loss during curing, and achieving adequate compaction should be followed. Shrinkage cracks that develop usually do not affect the stability of the layer. However, they should be sealed to reduce moisture intrusion.
- Large aggregate in the FDR mixture may result in dislodged surface aggregate and a rough surface prior to paving. The motoring public may consider this an inconvenience or annoyance. However, no special paving measures, beyond brooming of loose material, are typically necessary and the rough surface may enhance the bond between the FDR and pavement.
- Existing utilities are expected to be located in the area of reclamation. The utilities should be identified and located by the contractor, and the reclamation operations adjusted accordingly.

#### **GENERAL DRAINAGE CONSIDERATIONS**

The stability of pavement is greatly affected by poor drainage conditions that saturate the FDR and subgrade. Therefore, adequate drainage measures should be installed to enhance the pavement performance. Drainage measures may include under-drains along the roadway edge and cross-drains in sump areas. The drains should be graded to flow by gravity to a suitable outlet point. The location, depth, and type of drains will depend on the specific conditions and should be completed prior to the paving operations.

As previously described in the “Site Observations and Field Exploration” portion of this report, areas of the road appear to be poorly drained, and water was encountered in several test pits. The water encountered within the excavated roadway section may negatively affect the stability of the proposed FDR. Under-drains, as described above, may aid in alleviating this water issue. However, suitable outlet locations may be difficult to locate due to the low lying nature of these areas. Any underdrains, located within the area of FDR, should be founded at a depth greater than the mixing depth of the reclaimer to avoid damage.

**LIMITATIONS**

This report, including all supporting field data, field notes, laboratory test data, calculations, estimates and other documents prepared by GTA in connection with this Project have been prepared for the exclusive use of Dover Township pursuant to the agreement between GTA and Dover Township dated January 21, 2024, and in accordance with generally accepted engineering practice. All terms and conditions set forth in the agreement are incorporated herein. No warranty, express or implied is made herein. Use and reproduction of this report by any other person is unauthorized.

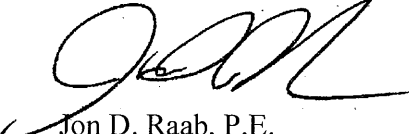
The analyses and recommendations contained in this report are based on the data obtained from limited testing of the encountered materials and our review of provided information. Test pits indicate soil conditions only at specific locations and times, and only at the depths penetrated. They do not necessarily reflect strata or variations that may exist between exploration locations. Consequently, the analyses and recommendations must be considered preliminary until the soil conditions can be verified by direct observation at the time of construction. If variations of subsurface conditions from those described in this report are noted during construction, recommendations in this report may need to be re-evaluated.

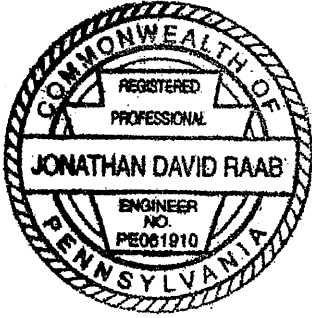
Geo-Technology Associates, Inc. is not responsible for any claims, damages, or liability associated with interpretation of subsurface data or reuse of the subsurface data or engineering analyses without the expressed written authorization of GTA. This report and the attached information are instruments of service. The subject matter of this report is limited to the facts and matters stated herein. Absence of a reference to any other conditions or subject matter shall not be construed by the reader to imply approval by the writer.

Thank you for the opportunity to be of assistance. Please contact our office at (717) 318-5451 if you have questions or require additional information.

Sincerely,  
**GEO-TECHNOLOGY ASSOCIATES, INC.**

  
Eric Alvarez  
Senior Project Manager

  
Jon D. Raab, P.E.  
Vice President



EFA/BSS/JDR/efa  
31240468  
Attachment: Laboratory Testing  
Test Pit Photographs  
Supplemental FDR Cement Stabilization Considerations

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	50.6	14.3	14.1	10.8	5.3	4.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	100.0		
1.5	100.0		
1	100.0		
.75	100.0		
.5	86.6		
.375	77.5		
#4	49.4		
#8	36.9		
#10	35.1		
#16	32.0		
#30	24.9		
#40	21.0		
#50	17.1		
#100	12.7		
#200	10.2		
#270	9.5		
0.0354 mm.	8.6		
0.0226 mm.	7.4		
0.0131 mm.	7.1		
0.0093 mm.	6.3		
0.0066 mm.	5.5		
0.0033 mm.	4.2		
0.0013 mm.	3.1		

**Soil Description**

well-graded gravel with silt and sand

**Atterberg Limits**

PL= NP    LL= NP    PI= NP    NM=

**Coefficients**

D<sub>90</sub>= 13.8984    D<sub>85</sub>= 12.1137    D<sub>60</sub>= 6.2360  
D<sub>50</sub>= 4.8330    D<sub>30</sub>= 0.9308    D<sub>15</sub>= 0.2307  
D<sub>10</sub>= 0.0684    C<sub>u</sub>= 91.23    C<sub>c</sub>= 2.03

**Classification**

USCS= GW-GM    AASHTO= A-1-a

**Remarks**

FDR Composite Mixture: 42% Bit, 25% Agg, 33% Soil

\* (no specification provided)

Location: 5% cement Proctor

Date: 2/29/2024



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1803 Mt. Rose Avenue  
York, PA 17403

Client: Dover Township  
Project: Pinchtown Road 2024

Project No: 31240468

Figure

ASTM Specifications performed may include: D42.1, D422, D2216, D2217, and D4318.

Tested By: DMG

Checked By: JDR

**MOISTURE DENSITY RELATIONSHIP TEST REPORT**  
**ASTM D 698-12 Method C Standard**

**Project No.:** 31240468

**Date:** 2/29/2024

**Project:** Pinchtown Road 2024

**Client:** Dover Township

**Location:** 5% cement Proctor

**Remarks:** FDR Composite Mixture: 42% Bit, 25% Agg, 33% Soil  
 Proctor completed with 5% Portland Cement

**MATERIAL DESCRIPTION**

**Description:** well-graded gravel with silt and sand

**Classifications -**

**USCS:** GW-GM

**AASHTO:** A-1-a

**Nat. Moist. =**

**Sp.G. =**

**Liquid Limit =** NP

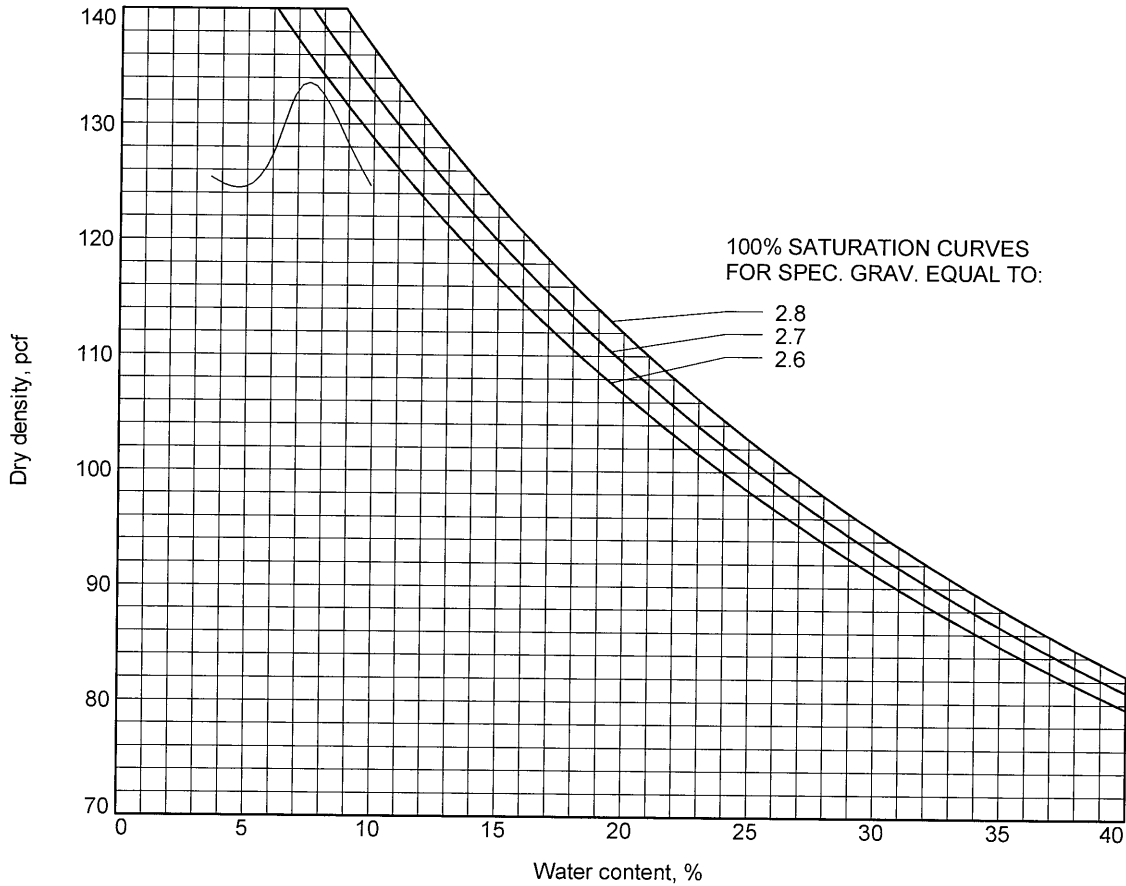
**Plasticity Index =** NP

**% < No.200 =** 10.2 %

**TEST RESULTS**

Maximum dry density = 133.6 pcf

Optimum moisture = 7.4 %



**Figure**

Geo-Technology Associates, Inc.

ASTM Specifications performed may include: D421, D422, D2216, D2217, and D4318.

**Tested By:** BSS

**Checked By:** JDR

# PINCHTOWN ROAD 2024

TEST PIT PHOTOGRAPHS











## SUPPLEMENTAL CEMENT STABILIZATION CONSIDERATIONS

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The following paragraphs provide further direction concerning typical issues that affect the construction and performance of cement stabilized materials. These recommendations should not be considered to be a specification.

**Existing Utilities** - Existing utilities may be located in the area of reclamation. The utilities should be identified and located by the contractor, and the reclamation operations adjusted accordingly.

**Planned Grade Changes** - Design changes to the vertical roadway geometry that require excavation or fill may modify the ratio or type of soil/aggregate/asphalt in the FDR materials. New fill to raise the road profile should consist of either pulverized FDR material or dense-graded aggregate. Ensure that the subgrade is stable below any areas of widening or profile increases, as unstable new fill can compromise the stability of the overlying FDR. Excavating to lower roadway grades may result in more soil incorporated into the FDR mixture. In this case, placement of additional cement may be necessary to accommodate the loss of coarse pavement material in the FDR mixture.

### **Recommended FDR Widths**

Unless the roadway is bordered by curbing or other immovable structures, the lateral extent of stabilization should be wider than the limits of the proposed asphalt pavement, to provide lateral subgrade support and to reduce the potential for edge failure of the pavement surface. The FDR should extend 12 inches outside of the proposed pavement, except that areas of width constraints, such as guiderails and ditches, a minimum additional width of 6 inches is acceptable.

**Widening Considerations** - Stabilization that extends beyond the existing edge of aggregate or asphalt pavement may possibly encounter unsuitable material outside the roadway. Where widening is less than one foot beyond the existing edge of pavement, at a minimum we recommend removal of topsoil before proceeding with conventional reclaiming. For areas where the widening extends more than one foot beyond the existing edge of pavement, we recommend removal of topsoil and unstable surface soil. This will allow evaluation of the subgrade stability by proof rolling and hand probing. Additional depths of excavation should be performed until stable subgrade is achieved. The excavations should be backfilled with dense-graded aggregate in a similar proportion to that in the existing pavement. The purpose of the additional aggregate is to generate similar strengths to the material in the center of the roadway.

**Bridge/Culvert Approach and Pavement Tie-in Considerations** - Approaches to bridges and culverts as well as tie-in to existing pavements will require additional grading measures to allow an adequate transition to the structures. This will likely require regrading prior to, or after pulverization to provide a transition that allows the proposed bituminous pavement overlay and stabilized layer to tie into the existing structure grades, without sacrificing thickness of the pavement layers. Coordination with the project civil engineer may be required to ensure proper final grades and drainage considerations, as well as to provide temporary grading or wedging for traffic access.

**Drainage Measures** - The presence of water within the stabilized layer and soil subgrade will cause premature degradation of the stabilized surface due to freeze/thaw, wetting/drying, and subsurface erosion. Where surface and subsurface drainage problems are anticipated or encountered, drainage measures should be incorporated. Drainage measures may include installation of base drains along

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## SUPPLEMENTAL CEMENT STABILIZATION CONSIDERATIONS

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the roadway edge, cross-drains (in sump areas and wherever else necessary), blanket drains in areas of widespread seepage/springs, and the creation of swales. The drains and swales should be graded to flow by gravity to a suitable outlet point. The location, depth, and type of drains/swales will depend on the specific conditions and their location with respect to the stabilized surface, and should be completed prior to beginning stabilization operations. The need for these drainage measures may not be able to be identified before construction. In some cases, such as construction occurring during dry periods, areas requiring drainage measures may not be identified until after the stabilization and proposed surface is completed. The owner should be consulted prior to constructing drainage measures, to ensure that the measures are compliant with environmental regulations.

**Low Temperature Considerations** - Soil temperatures near or below freezing, and the presence of snow, ice, and frozen material should be expected to negatively influence construction and the performance of the stabilized layer. These conditions may interfere with subgrade pulverization, moisture conditioning, cement mixing, compaction, and curing. Cement hydration and strength development will be slowed by low temperatures, and may stop if the material temperature drops below 40 degrees, or becomes frozen.

Soil specimens cured at 40 degrees typically exhibit reduced strength levels of 25% or more when compared to specimens cured under standard temperature conditions. Therefore, strength development for cement stabilization performed during low temperature conditions should not be expected to meet laboratory mix design requirements. As the temperature decreases below 40 degrees, the risk of strength reduction also incrementally increases, which will compromise the performance of the stabilized layer. When the soil temperatures drop below 32 degrees, there is a risk of frozen pore water during mixing and subsequent freezing of the completed layer, which will result in a significant decrease in initial and long-term strength development. Therefore, we do not recommend performing soil stabilization when soil temperatures are below freezing or long-term freezing is expected in the first 7 days after construction.

The following measures should be considered to counteract the effects of low temperature (above freezing) conditions during stabilization operations: (1) increasing cement application rate; (2) use of Type III Portland cement to increase the initial rate of strength gain; (3) placement of graded aggregate or soil fill to insulate the surface of treated layer from low temperatures; and (4) overexcavation to remove frozen soil prior to stabilization.

### **Pulverization and Cement Mixing Passes**

When pulverization is recommended, it should be performed to the planned FDR depth. The pulverized material shall be compacted and shaped to the proposed final grades before spreading cement. For elevated spread rates, GTA may recommend spreading and mixing cement in two equal passes. If high plasticity soils are encountered, additional mixing passes may be necessary to adequately mix the soils or to adjust moisture. All mixing passes should be completed within 2 hours. We recommend that water be direct injected during mixing, and that top watering not be permitted.

**Unstable Soils Below Stabilized Layer** - Unstable soil below the stabilized layer may cause the layer to experience excessive deflection and distress when exposed to loading. A cement-stabilized layer is not intended to bridge soft/loose/wet soil and uncompacted fill materials, when exposed to traffic and/or concentrated dead loads. Therefore, GTA recommends that during pulverization or

## SUPPLEMENTAL CEMENT STABILIZATION CONSIDERATIONS

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prior to placement of cement, the underlying subgrade be evaluated by proof-rolling, hand probing, and other suitable means. Thus is especially important along the edges of the roadway where instability is typically more prevalent. This evaluation will allow unstable subgrades to be proactively identified so the appropriate measures for stabilization may be incorporated. These measures may include overexcavation and replacement with compacted dense graded aggregate; chemical mixing to greater depths and increasing the cement application rate accordingly; or constructing a two layer FDR system, by removing the upper lift of material to allow for mixing at a greater depth followed by replacement and mixing of the upper lift. We recommend providing contingency items in the contract for areas that require deeper remediation and areas that require additional cement due to variable mixture conditions.

**Moisture Content** - The moisture content of the stabilized material affects the performance of the stabilization. Material that is too dry will not have enough moisture to hydrate the cement and will not reach the desired level of compaction and strength. Materials that are too wet will be difficult to grade and compact and can result in an elevated risk of shrinkage cracking. Therefore, the moisture content of the material should be monitored during mixing. The moisture content of the pulverized material should be within 2 percentage points of the optimum moisture content during mixing, unless indicated otherwise in the project specifications or the mix design.

**Shallow Rock Considerations** – The presence of shallow rock will influence the stabilization operations. Typically, if the material can be pulverized with the reclaimer then it should be incorporated into the treated layer. However, if pulverization of the material is difficult, it is likely suitable for support of a thinner stabilized layer. In this case, the reclaimer head should be raised accordingly to only treat material that is pulverized by normal means. The cement application rate can be adjusted accordingly for thinner treatment depths. Where a significant quantity of large diameter rock particles are within the subgrades, the resulting material may not become adequately stabilized due to the absence of fines to fill in the voids in the rock. This may be mitigated by the addition of low plasticity soil, fine aggregate, or HMA millings on top of the rock layer prior to pulverization and/or chemical mixing.

**Compaction and Curing Considerations** - Materials stabilized with Type I/II cement should be graded, compacted, final rolled, and fine graded before the material “sets,” which is usually within approximately 4 hours of mixing, unless the project specifications or mix design indicate otherwise. The time depends on the soil type, cement application rate, and weather conditions. Materials should be compacted in accordance with project specifications. Moist curing of the stabilized surface will help in the hydration process and increases the strength of the stabilized layer. Moist curing can consist of an approved surface sealant or periodic water spraying to keep the surface moist.

**Observation and Testing Considerations** - It is recommended that GTA observe the stabilization operations, as modifications in the depth of mixing, compaction, moisture content of the materials, and percent chemical additive may be necessary, based on variation in field conditions. Moisture content testing of the reclaimed materials is considered necessary to verify that an adequate amount of water has been added during mixing. Moisture density relationship testing will need to be performed on the pulverized and chemically stabilized soils to establish the maximum dry density needed for compaction control. Compacted samples of chemically stabilized material can be fabricated for subsequent unconfined compressive strength testing in the laboratory. Field density

## SUPPLEMENTAL CEMENT STABILIZATION CONSIDERATIONS

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testing should be performed during rolling to verify that the reclaimed material has been compacted in accordance with the applicable specifications. A proofroll should be performed to evaluate the stability of the stabilized layer prior to the placement of traffic and pavement surface.

**Vehicular Traffic Considerations** - Light vehicular traffic can typically be allowed on the stabilized layer immediately after final compaction, provided that the layer is stable and does not rut/shove under the vehicle loads. However, premature disturbance of the stabilized layer by heavily loaded traffic can compromise the integrity of the stabilized layer. Therefore, heavy traffic should not be permitted on the layer until it is stable (does not rut or shove) under the traffic, which may require two to five days, depending on the temperatures, precipitation, and other factors. A proof-roll with a loaded dump truck can be performed to assess the stability prior to allowing heavy traffic on the layer. We recommend that the stabilized material be surfaced as soon as the layer is stable. Placing the surface layer will help with curing and protection of the stabilized layer. During the curing and surfacing periods, ensure that vehicles are not riding over the edge of the stabilized layer.

**Surface Preparation Prior to Paving**- The FDR surface should be swept prior to paving to remove loose material. Large aggregate in the FDR mixture may result in dislodged surface aggregate and a rough surface prior to paving. The motoring public may consider this an inconvenience or annoyance. However, no special paving measures, beyond brooming of loose material, are typically necessary and the rough surface may enhance the bond between the FDR and pavement.

**Risk of Thin Pavement Surfaces** - A concern with chip seal surfaces and bituminous pavement less than 2 inches thick is the potential for raveling or peeling of the surface from the FDR. The risk is higher in areas of high traffic columns, heavy vehicles, at intersections due to braking and turning movements, and at sharp curves and steep hills that are subjected to turning and braking. Therefore, expect that periodic maintenance and re-application of the chip seal will be necessary. The surface of the FDR should be prepared to provide as much friction as possible to promote the bituminous material adhering to the FDR. The FDR surface should be cleaned with a street sweeper to remove all loose particles prior to placing the bituminous surface.

With thin bituminous pavement overlays and chip seals, special attention will be necessary during construction to provide a final FDR surface with minimal irregularities. Rough surfaces, often containing larger sized aggregate, cobbles, or rock, will result in an irregular paved surface. If the FDR surface is irregular, a thin layer of crushed aggregate or scratch course of asphalt can be used to provide a uniform paving surface.

**Cement Damage** – Cement dust can cause damage to vehicles that travel through the dry cement or the uncured, stabilized material. The contractor is responsible for providing means, methods, and sequences, so that public traffic is not exposed to cement dust or cement spatter. This may include, but is not limited to, sequencing traffic and controlling spreading operations to provide a travel lane free of cement, providing temporary windrows to control lateral cement spreading, maintaining road closures and detours during cement spreading and mixing, providing a pilot vehicle to direct traffic through the work area, controlling cement spreading and mixing at driveways and intersections, and notifying and coordinating with adjacent property owners for driveway access.

## SUPPLEMENTAL CEMENT STABILIZATION CONSIDERATIONS

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Airborne cement dust can spread onto adjacent properties causing damage. The contractor is responsible for providing means, methods, and sequences such that airborne cement does not damage adjacent properties. This may include, but is not limited to, limiting transfer pressure of cement from tankers to spreaders, providing equipment with dust control measures (skirts, filters, etc.), maintaining and replacing all worn equipment (spreader skirts and spreader filters), performing cement transfer operations away from sensitive and/or populated areas, suspending cement spreading during windy conditions, constructing windrows to prevent cement from laterally spreading, and limiting the speed of vehicles and equipment when travelling through cement. The contractor should be responsible for the means, methods, and sequences that will be used to eliminate exposure of vehicles and adjacent properties to cement.

We recommend that the contractor provide a work plan that details the means, methods, and sequences, including traffic control that will be implemented to ensure that cement does not damage vehicles or adjacent properties.

**Slope Instability** - The FDR design does not consider the effects of slope movement upon the pavement reconstruction. Slope movement may occur from global instability of embankments and steep slopes: gradual slope creep that is often exhibited by leaning guiderail, fence posts, and trees; and shoulder pushing, where the edge of the pavement is placed at the edge of a slope or drainage ditch, and the lack of edge confinement results in lateral movement of the shoulder. Typical FDR depths of 12 to 16 inches will not compensate for these types of slope movement. FDR depths of 24 inches can help reduce, but not eliminate, the impacts of slope creep and shoulder pushing. Global slope stability will likely occur regardless of the FDR depth or strength. We recommend keeping the roadway as far away as possible from slope edges and drainage ditches to reduce the potential for slope instability induced distress.

**Shrinkage Cracking Potential** – Due to the volume reduction of the soil and cement during curing and drying, shrinkage cracking of cement stabilized material may occur. These cracks can reflect through the bituminous pavement surface, creating a conduit for water infiltration into and below the stabilized base. Therefore, the owner should be aware of the potential maintenance requirements for sealing cracks in the pavement surface. Measures can be taken during construction to reduce, but not eliminate, the potential for shrinkage cracking are limiting water in the mixture (within 2% of the optimum moisture content); preventing rapid moisture loss by providing moisture during curing or promptly placing an approved moisture barrier; and achieving adequate compaction. Additional measures can be taken after construction, such as providing a stress relief layer below the base paving, delaying paving to allow cracks to form, microcracking, or cutting control joints. GTA can provide additional information on each of these measures.

**Future Crack/Joint Sealing** - Surface water infiltration into the underlying subgrade is one of the primary causes of premature pavement failures. Upon completion of the surface paving operations, GTA recommends sealing along all pavement curbs, catch basins, paving joints, and concrete slabs/aprons to reduce the potential for water infiltration into the underlying treated subgrade. Thermal cracks can also develop in the bituminous pavement or surface seal, particularly along cold joints. Therefore, regular maintenance should be performed on the pavement, including sealing cracks as soon as possible after cracking develops and as often as necessary to block the passage of water to the subgrade.



**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

Project Name:	2024 Paving Pinchtown FDR
Awarding Agency:	Dover Township
Contract Award Date:	4/22/2024
Serial Number:	24-01411
Project Classification:	Highway
Determination Date:	2/14/2024
Assigned Field Office:	Harrisburg
Field Office Phone Number:	(717)787-4763
Toll Free Phone Number:	(800)932-0665
Project County:	York County

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 24-01411 - Building</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Asbestos & Insulation Workers	6/26/2023		\$35.80	\$32.01	\$67.81
Asbestos & Insulation Workers	7/1/2024		\$35.80	\$34.06	\$69.86
Boilermakers	1/1/2023		\$51.27	\$35.30	\$86.57
Boilermakers	1/1/2024		\$52.10	\$35.72	\$87.82
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	4/30/2023		\$38.27	\$18.18	\$56.45
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	4/28/2024		\$40.12	\$18.18	\$58.30
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/4/2025		\$41.97	\$18.18	\$60.15
Carpenters - Piledriver/Welder	1/1/2023		\$40.63	\$21.22	\$61.85
Carpenters - Piledriver/Welder	1/1/2024		\$42.13	\$21.97	\$64.10
Carpenters - Piledriver/Welder	1/1/2025		\$43.38	\$22.72	\$66.10
Carpenters - Piledriver/Welder	1/1/2026		\$44.63	\$23.47	\$68.10
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2023		\$35.06	\$17.72	\$52.78
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2024		\$36.56	\$17.72	\$54.28
Cement Finishers & Plasterers	4/30/2023		\$28.23	\$22.27	\$50.50
Cement Finishers & Plasterers	4/28/2024		\$30.23	\$22.27	\$52.50
Cement Finishers & Plasterers	5/4/2025		\$32.23	\$22.27	\$54.50
Cement Finishers & Plasterers	5/3/2026		\$34.23	\$22.27	\$56.50
Cement Masons	5/1/2023		\$34.05	\$21.25	\$55.30
Drywall Finisher	5/1/2023		\$30.10	\$22.14	\$52.24
Electricians	6/1/2023		\$37.00	\$26.67	\$63.67
Electricians	6/1/2024		\$37.00	\$30.51	\$67.51
Electricians	6/1/2025		\$37.00	\$32.50	\$69.50
Elevator Constructor	1/1/2023		\$53.93	\$38.34	\$92.27
Elevator Constructor	1/1/2024		\$60.76	\$39.19	\$99.95
Glazier	5/1/2023		\$31.23	\$20.66	\$51.89
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2023		\$36.26	\$31.38	\$67.64
Laborers (Class 01 - See notes)	5/1/2023		\$23.26	\$18.03	\$41.29
Laborers (Class 02 - See notes)	5/1/2023		\$25.26	\$18.03	\$43.29
Laborers (Class 03 - See notes)	4/30/2023		\$26.47	\$18.22	\$44.69
Laborers (Class 04 - See notes)	4/30/2023		\$27.97	\$18.22	\$46.19
Laborers (Class 05 - See notes)	4/30/2023		\$28.47	\$18.22	\$46.69
Laborers (Class 06 - See notes)	5/1/2023		\$25.26	\$18.03	\$43.29
Marble Mason	5/1/2023		\$34.80	\$17.74	\$52.54
Marble Mason	5/1/2024		\$36.75	\$17.74	\$54.49
Marble Mason	5/1/2025		\$38.70	\$17.74	\$56.44
Millwright	6/1/2023		\$39.21	\$22.95	\$62.16
Millwright	6/1/2024		\$41.07	\$22.95	\$64.02
Millwright	6/1/2025		\$43.00	\$22.95	\$65.95
Millwright	6/1/2026		\$44.97	\$22.95	\$67.92
Operators (Building, Class 01 - See Notes)	5/1/2023		\$42.57	\$29.24	\$71.81

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 24-01411 - Building</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Operators (Building, Class 01A - See Notes)	5/1/2023		\$44.82	\$29.90	\$74.72
Operators (Building, Class 02 - See Notes)	5/1/2023		\$42.29	\$29.15	\$71.44
Operators (Building, Class 02A - See Notes)	5/1/2023		\$44.54	\$29.82	\$74.36
Operators (Building, Class 03 - See Notes)	5/1/2023		\$39.57	\$28.34	\$67.91
Operators (Building, Class 04 - See Notes)	5/1/2023		\$38.42	\$28.02	\$66.44
Operators (Building, Class 05 - See Notes)	5/1/2023		\$37.97	\$27.89	\$65.86
Operators (Building, Class 06 - See Notes)	5/1/2023		\$37.10	\$27.62	\$64.72
Operators (Building, Class 07A- See Notes)	5/1/2023		\$51.63	\$33.34	\$84.97
Operators (Building, Class 07B- See Notes)	5/1/2023		\$51.28	\$33.24	\$84.52
Painters Class 1 (see notes)	5/1/2023		\$27.02	\$17.54	\$44.56
Painters Class 2 (see notes)	5/1/2020		\$27.43	\$15.99	\$43.42
Painters Class 3 (see notes)	5/1/2020		\$33.18	\$15.99	\$49.17
Pile Driver Divers (Building, Heavy, Highway)	1/1/2023		\$58.70	\$21.22	\$79.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2024		\$60.95	\$21.97	\$82.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2025		\$62.82	\$22.72	\$85.54
Pile Driver Divers (Building, Heavy, Highway)	1/1/2026		\$64.70	\$23.47	\$88.17
Piledrivers	1/1/2023		\$39.13	\$21.22	\$60.35
Piledrivers	1/1/2024		\$40.63	\$21.97	\$62.60
Piledrivers	1/1/2025		\$41.88	\$22.72	\$64.60
Piledrivers	1/1/2026		\$43.13	\$23.47	\$66.60
Plasterers	5/1/2023		\$31.33	\$20.83	\$52.16
Plumber/Pipefitter	5/1/2023		\$41.36	\$29.72	\$71.08
Roofers (Composition)	5/1/2023		\$42.63	\$34.62	\$77.25
Roofers (Shingle)	5/1/2023		\$32.85	\$22.10	\$54.95
Roofers (Slate & Tile)	5/1/2023		\$35.85	\$22.10	\$57.95
Sheet Metal Workers	6/1/2022		\$40.22	\$41.01	\$81.23
Sheet Metal Workers	6/1/2023		\$41.41	\$42.32	\$83.73
Sign Makers and Hangars	7/15/2022		\$30.54	\$24.35	\$54.89
Sign Makers and Hangars	7/15/2023		\$31.76	\$24.63	\$56.39
Sprinklerfitters	4/1/2023		\$44.33	\$28.04	\$72.37
Terrazzo Finisher	5/1/2023		\$35.79	\$19.25	\$55.04
Terrazzo Finisher	5/1/2024		\$37.16	\$19.26	\$56.42
Terrazzo Grinder	5/1/2023		\$36.54	\$19.25	\$55.79
Terrazzo Grinder	5/1/2024		\$37.92	\$19.26	\$57.18
Terrazzo Mechanics	5/1/2023		\$36.51	\$21.00	\$57.51
Terrazzo Mechanics	5/1/2024		\$37.94	\$21.01	\$58.95
Tile & Marble Finisher	5/1/2023		\$32.91	\$15.49	\$48.40
Tile & Marble Finisher	5/1/2024		\$34.86	\$15.49	\$50.35
Tile & Marble Finisher	5/1/2025		\$36.81	\$15.49	\$52.30
Tile Setter	5/1/2023		\$34.80	\$17.74	\$52.54
Tile Setter	5/1/2024		\$36.75	\$17.74	\$54.49
Tile Setter	5/1/2025		\$38.70	\$17.74	\$56.44
Truckdriver class 1(see notes)	5/1/2021		\$37.72	\$0.00	\$37.72
Truckdriver class 2 (see notes)	5/1/2021		\$37.79	\$0.00	\$37.79

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 24-01411 - Building</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Truckdriver class 3 (see notes)	5/1/2021		\$38.28	\$0.00	\$38.28
Window Film / Tint Installer	6/1/2019		\$24.52	\$12.08	\$36.60

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 24-01411 - Heavy/Highway</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Carpenter	5/1/2023		\$35.32	\$19.09	\$54.41
Carpenter	5/1/2024		\$36.12	\$19.79	\$55.91
Carpenter	5/1/2025		\$36.87	\$20.49	\$57.36
Carpenter	5/1/2026		\$37.63	\$21.18	\$58.81
Carpenter Welder	5/1/2023		\$36.07	\$19.09	\$55.16
Carpenter Welder	5/1/2024		\$36.87	\$19.79	\$56.66
Carpenter Welder	5/1/2025		\$37.62	\$20.49	\$58.11
Carpenter Welder	5/1/2026		\$38.38	\$21.18	\$59.56
Carpenters - Piledriver/Welder	1/1/2023		\$36.07	\$19.09	\$55.16
Carpenters - Piledriver/Welder	1/1/2024		\$36.87	\$19.79	\$56.66
Carpenters - Piledriver/Welder	1/1/2025		\$37.62	\$20.49	\$58.11
Carpenters - Piledriver/Welder	1/1/2026		\$38.38	\$21.18	\$59.56
Cement Finishers	6/1/2016		\$27.60	\$20.85	\$48.45
Electric Lineman	5/29/2023		\$51.40	\$29.62	\$81.02
Electric Lineman	6/3/2024		\$52.80	\$30.61	\$83.41
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2021		\$34.01	\$31.13	\$65.14
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2023		\$36.26	\$31.38	\$67.64
Laborers (Class 01 - See notes)	5/1/2023		\$24.81	\$18.99	\$43.80
Laborers (Class 01 - See notes)	5/1/2024		\$25.61	\$19.49	\$45.10
Laborers (Class 02 - See notes)	5/1/2023		\$31.43	\$18.99	\$50.42
Laborers (Class 02 - See notes)	5/1/2024		\$32.23	\$19.49	\$51.72
Laborers (Class 03 - See notes)	5/1/2023		\$28.42	\$18.99	\$47.41
Laborers (Class 03 - See notes)	5/1/2024		\$29.22	\$19.49	\$48.71
Laborers (Class 04 - See notes)	5/1/2023		\$28.77	\$18.99	\$47.76
Laborers (Class 04 - See notes)	5/1/2024		\$29.57	\$19.49	\$49.06
Laborers (Class 05 - See notes)	5/1/2023		\$29.44	\$18.99	\$48.43
Laborers (Class 05 - See notes)	5/1/2024		\$30.24	\$19.49	\$49.73
Laborers (Class 06 - See notes)	5/1/2023		\$28.86	\$18.99	\$47.85
Laborers (Class 06 - See notes)	5/1/2024		\$29.66	\$19.49	\$49.15
Laborers (Class 07 - See notes)	5/1/2023		\$29.15	\$18.99	\$48.14
Laborers (Class 07 - See notes)	5/1/2024		\$29.95	\$19.49	\$49.44
Laborers (Class 08 - See notes)	5/1/2023		\$29.63	\$18.99	\$48.62
Laborers (Class 08 - See notes)	5/1/2024		\$30.43	\$19.49	\$49.92
Millwright	6/1/2023		\$41.51	\$23.33	\$64.84
Millwright	6/1/2024		\$43.46	\$23.33	\$66.79
Millwright	6/1/2025		\$45.46	\$23.33	\$68.79
Millwright	6/1/2026		\$47.52	\$23.33	\$70.85
Operators (Heavy, Class 01 - See Notes)	5/1/2023		\$41.14	\$28.82	\$69.96
Operators (Heavy, Class 01 - See Notes)	5/1/2024		\$42.30	\$29.66	\$71.96
Operators (Heavy, Class 01 - See Notes)	5/1/2025		\$43.46	\$30.50	\$73.96
Operators (Heavy, Class 01 - See Notes)	5/1/2026		\$44.61	\$31.35	\$75.96
Operators (Heavy, Class 01A - See Notes)	5/1/2023		\$43.39	\$29.48	\$72.87
Operators (Heavy, Class 01A - See Notes)	5/1/2024		\$44.55	\$30.32	\$74.87

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 24-01411 - Heavy/Highway</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Operators (Heavy, Class 01A - See Notes)	5/1/2025		\$45.71	\$31.16	\$76.87
Operators (Heavy, Class 01A - See Notes)	5/1/2026		\$46.86	\$32.01	\$78.87
Operators (Heavy, Class 02 - See Notes)	5/1/2023		\$40.86	\$28.73	\$69.59
Operators (Heavy, Class 02 - See Notes)	5/1/2024		\$42.02	\$29.57	\$71.59
Operators (Heavy, Class 02 - See Notes)	5/1/2025		\$43.18	\$30.41	\$73.59
Operators (Heavy, Class 02 - See Notes)	5/1/2026		\$44.34	\$31.25	\$75.59
Operators (Heavy, Class 02A - See Notes)	5/1/2023		\$43.11	\$29.40	\$72.51
Operators (Heavy, Class 02A - See Notes)	5/1/2024		\$44.27	\$30.24	\$74.51
Operators (Heavy, Class 02A - See Notes)	5/1/2025		\$45.43	\$31.08	\$76.51
Operators (Heavy, Class 02A - See Notes)	5/1/2026		\$46.59	\$31.92	\$78.51
Operators (Heavy, Class 03 - See Notes)	5/1/2023		\$37.95	\$27.86	\$65.81
Operators (Heavy, Class 03 - See Notes)	5/1/2024		\$39.11	\$28.70	\$67.81
Operators (Heavy, Class 03 - See Notes)	5/1/2025		\$40.26	\$29.55	\$69.81
Operators (Heavy, Class 03 - See Notes)	5/1/2026		\$41.43	\$30.38	\$71.81
Operators (Heavy, Class 04 - See Notes)	5/1/2023		\$36.80	\$27.54	\$64.34
Operators (Heavy, Class 04 - See Notes)	5/1/2024		\$37.96	\$28.38	\$66.34
Operators (Heavy, Class 04 - See Notes)	5/1/2025		\$39.12	\$29.22	\$68.34
Operators (Heavy, Class 04 - See Notes)	5/1/2026		\$40.28	\$30.06	\$70.34
Operators (Heavy, Class 05 - See Notes)	5/1/2023		\$36.35	\$27.41	\$63.76
Operators (Heavy, Class 05 - See Notes)	5/1/2024		\$37.51	\$28.25	\$65.76
Operators (Heavy, Class 05 - See Notes)	5/1/2025		\$38.67	\$29.09	\$67.76
Operators (Heavy, Class 05 - See Notes)	5/1/2026		\$39.83	\$29.93	\$69.76
Operators (Heavy, Class 06 - See Notes)	5/1/2023		\$35.48	\$27.14	\$62.62
Operators (Heavy, Class 06 - See Notes)	5/1/2024		\$36.64	\$27.98	\$64.62
Operators (Heavy, Class 06 - See Notes)	5/1/2025		\$37.80	\$28.82	\$66.62
Operators (Heavy, Class 06 - See Notes)	5/1/2026		\$38.96	\$29.66	\$68.62
Operators (Heavy, Class 07A - See Notes)	5/1/2023		\$49.93	\$32.83	\$82.76
Operators (Heavy, Class 07A - See Notes)	5/1/2024		\$51.39	\$33.77	\$85.16
Operators (Heavy, Class 07A - See Notes)	5/1/2025		\$52.85	\$34.71	\$87.56
Operators (Heavy, Class 07A - See Notes)	5/1/2026		\$54.32	\$35.64	\$89.96
Operators (Heavy, Class 07B - See Notes)	5/1/2023		\$49.58	\$32.73	\$82.31
Operators (Heavy, Class 07B - See Notes)	5/1/2024		\$51.04	\$33.67	\$84.71
Operators (Heavy, Class 07B - See Notes)	5/1/2025		\$52.51	\$34.60	\$87.11
Operators (Heavy, Class 07B - See Notes)	5/1/2026		\$53.97	\$35.54	\$89.51
Operators (Highway, Class 01 - See Notes)	5/1/2023		\$40.25	\$28.55	\$68.80
Operators (Highway, Class 01 - See Notes)	5/1/2024		\$41.41	\$29.39	\$70.80
Operators (Highway, Class 01 - See Notes)	5/1/2025		\$42.56	\$30.24	\$72.80
Operators (Highway, Class 01 - See Notes)	5/1/2026		\$43.72	\$31.08	\$74.80
Operators (Highway, Class 01a - See Notes)	5/1/2023		\$42.50	\$29.23	\$71.73
Operators (Highway, Class 01a - See Notes)	5/1/2024		\$43.66	\$30.07	\$73.73
Operators (Highway, Class 01a - See Notes)	5/1/2025		\$44.81	\$30.92	\$75.73
Operators (Highway, Class 01a - See Notes)	5/1/2026		\$45.97	\$31.76	\$77.73
Operators (Highway, Class 02 - See Notes)	5/1/2023		\$39.08	\$28.20	\$67.28
Operators (Highway, Class 02 - See Notes)	5/1/2024		\$40.24	\$29.04	\$69.28

**BUREAU OF LABOR LAW COMPLIANCE  
PREVAILING WAGES PROJECT RATES**

<b>Project: 24-01411 - Heavy/Highway</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Hourly Rate</b>	<b>Fringe Benefits</b>	<b>Total</b>
Operators (Highway, Class 02 - See Notes)	5/1/2025		\$41.39	\$29.89	\$71.28
Operators (Highway, Class 02 - See Notes)	5/1/2026		\$42.55	\$30.73	\$73.28
Operators (Highway, Class 03 - See Notes)	5/1/2023		\$38.39	\$27.99	\$66.38
Operators (Highway, Class 03 - See Notes)	5/1/2024		\$39.55	\$28.83	\$68.38
Operators (Highway, Class 03 - See Notes)	5/1/2025		\$40.70	\$29.68	\$70.38
Operators (Highway, Class 03 - See Notes)	5/1/2026		\$41.87	\$30.51	\$72.38
Operators (Highway, Class 04 - See Notes)	5/1/2023		\$37.94	\$27.86	\$65.80
Operators (Highway, Class 04 - See Notes)	5/1/2024		\$39.10	\$28.70	\$67.80
Operators (Highway, Class 04 - See Notes)	5/1/2025		\$40.26	\$29.54	\$69.80
Operators (Highway, Class 04 - See Notes)	5/1/2026		\$41.41	\$30.39	\$71.80
Operators (Highway, Class 05 - See Notes)	5/1/2023		\$37.42	\$27.72	\$65.14
Operators (Highway, Class 05 - See Notes)	5/1/2024		\$38.58	\$28.56	\$67.14
Operators (Highway, Class 05 - See Notes)	5/1/2025		\$39.73	\$29.41	\$69.14
Operators (Highway, Class 05 - See Notes)	5/1/2026		\$40.89	\$30.25	\$71.14
Operators (Highway, Class 06 - See Notes)	5/1/2023		\$40.48	\$28.62	\$69.10
Operators (Highway, Class 06 - See Notes)	5/1/2024		\$41.64	\$29.46	\$71.10
Operators (Highway, Class 06 - See Notes)	5/1/2025		\$42.80	\$30.30	\$73.10
Operators (Highway, Class 06 - See Notes)	5/1/2026		\$43.95	\$31.15	\$75.10
Operators (Highway, Class 06/A - See Notes)	5/1/2023		\$42.73	\$29.28	\$72.01
Operators (Highway, Class 06/A - See Notes)	5/1/2024		\$43.89	\$30.12	\$74.01
Operators (Highway, Class 06/A - See Notes)	5/1/2025		\$45.05	\$30.96	\$76.01
Operators (Highway, Class 06/A - See Notes)	5/1/2026		\$46.21	\$31.80	\$78.01
Operators (Highway, Class 07/A - See Notes)	5/1/2023		\$48.86	\$32.51	\$81.37
Operators (Highway, Class 07/A - See Notes)	5/1/2024		\$50.32	\$33.45	\$83.77
Operators (Highway, Class 07/A - See Notes)	5/1/2025		\$51.79	\$34.38	\$86.17
Operators (Highway, Class 07/A - See Notes)	5/1/2026		\$53.25	\$35.32	\$88.57
Operators (Highway, Class 07/B - See Notes)	5/1/2023		\$47.44	\$32.10	\$79.54
Operators (Highway, Class 07/B - See Notes)	5/1/2024		\$48.91	\$33.03	\$81.94
Operators (Highway, Class 07/B - See Notes)	5/1/2025		\$50.37	\$33.97	\$84.34
Operators (Highway, Class 07/B - See Notes)	5/1/2026		\$51.84	\$34.90	\$86.74
Painters Class 2 (see notes)	5/1/2023		\$29.15	\$17.54	\$46.69
Painters Class 3 (see notes)	5/1/2023		\$34.90	\$17.54	\$52.44
Pile Driver Divers (Building, Heavy, Highway)	1/1/2022		\$56.40	\$20.50	\$76.90
Piledrivers	5/1/2023		\$35.32	\$19.09	\$54.41
Piledrivers	5/1/2024		\$36.12	\$19.79	\$55.91
Piledrivers	5/1/2025		\$36.87	\$20.49	\$57.36
Piledrivers	5/1/2026		\$37.63	\$21.18	\$58.81
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2022		\$48.43	\$40.28	\$88.71
Truckdriver class 1(see notes)	5/1/2021		\$37.72	\$0.00	\$37.72
Truckdriver class 2 (see notes)	5/1/2021		\$37.79	\$0.00	\$37.79