MS-944 (7-09)



### PROPOSAL AND CONTRACT (WHEN EXECUTED)

**INSTRUCTIONS ON PAGE 4** 

THIS PROPOSAL INCLUDES INSTRUCTIONS TO BIDDERS

All en	velopes containing Bid proposals shall	Dover Township, 2nd Class
be cl	learly marked "Bid Proposal for letting of 4/18/2023 Water ."	MUNICIPALITY (NAME & TYPE)
	DATE	Brooke Scearce
•	2/	SECRETARY
	ed Proposals will be received on or before	
	_ on the above Letting Date.	2480 West Canal Road
TIME		Dover, PA 17315
Dide	will be opened and read at approximately	ADDRESS
	, on the above Letting Date.	PROPOSALS MUST BE MAILED OR OTHERWISE
TIME	, on the above Letting Date.	DELIVERED TO THE ABOVE ADDRESS.
2	forth in the Schedule of Prices (Attachment and specifications on file at Dover Tand special requirements contained herein Specifications (Publication 408), except (a) (Sec.102.01), and (b) Volumetric testing of	TR-465 DAILY BITUMINOUS MIXTURE all work on the following project as more specifically set ), in accordance with drawings ownship, 2nd Class as well as the supplements and/ or attached hereto and current PennDOT bidders need not be prequalified by PennDOT bituminous paving materials is not required (Sec. 409).  contractor will begin work on the date specified in the lin the special requirements, and will
3	Accompanying this proposal is a certified cl made payable to the municipality as a prop forfeited in case the contractor fails to comp	oosal guarantee which, it is understood, will be
B. PROPOS	AL OF:	
	NAME / ADDRES	S OF CONTRACTOR
	CONTRACTORS C	CERTIFICATION
	ereby certified as follows:	
1	The only person interested in the proposal a	as principal (s) is (are):
2	None of the above persons are employees	of the municipality.
3	This proposal is made without collusion with	n any other person, firm or corporation.
4	All plans and specifications referred to above	ve and the site of the work have been examined by the

price listed on the Schedule of Prices. (Attachment 1).

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

- 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.
- 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.

CONTRACTOR	
BY:	DATE:
WITNESSED OR ATTESTED BY:	DATE:
TO BE EXECUTED ONLY IN THE EVENT THE ABOVE PROPOS	SAL IS ACCEPTED
ACCEPTED ON :	
Dover Township, 2nd Class MUNICIPALITY	<del></del>
BY: ππ.ε:	
BY:	
SEAL BY:	
ATTESTED BY:	



#### ATTACHMENT 1 DEPARTMENT OF TRANSPORTATION TO MS - 944 ( PROPOSAL AND CONTRACT MS - 944 )

County:	York	Municipality:	Dover Township, 2nd Class	
		Project Number:		

#### LOCATION OF WORK:

Connection of 8" water main from Summer Dr to Fox Chase Dr. - Items 1A - 1J Project will start between lot 206 & 205 in Seasons Devolopment. The project will continue east through the field between 3655 and 3668 Fox Chase Dr. with the a tie in the blacktop.

#### **DESCRIPTION OF WORK:**

Mobilize, furnish and install E&S controls, install supplied ductile iron pipe, supplied sleeve, bends, mega lugs, locking rubbers, 8" valve, valve box, and aggregate from Summer Dr to Fox Chase Dr. Furnish materials to perform final grading, fertilization, seeding, mulching, blanketing, (3 pages attached) paving and demobilization. Dover township has construction and permanent right of ways, see attached plan and profile. This construction is subject to the provisions of the Pennsylvania Prevailing Wage Act. PA Prevailing Wage shall be paid to construction workers, laborers, and mechanics involved in this pipe project. Project Serial # is 23-01479. (9 pages attached)

ESCALATOR CLAUSE: (if adopted by Municipality.) An escalator clause does not apply to this contract.

				SCHEDULE OF PRICES		
	Item	Approximate	Unit	*Description	Unit	Total
1	No.	2 Quantities	3	4	5 Price	6
1A		1	L.S.	Mobilization		
1B		1	L.S.	Furnish and install E&S per plan date 2/23/2023		
1C		1	L.S.	Install supplied 8" x 8" sleeve		
1D		400	L.F.	Install supplied ductile iron pipe		
1E		1	L.S.	Install supplied 45 bend with install thrust blocks		
1F		4	L.S.	Install supplied 11 1/4 bends with locking		
				rubbers, mega lugs, and thrust blocks, per		
				attached detail 5195.		
1G		150'	L.S.	Remove and properly dispose of existing 8"		
				transite pipe		
1H		1	L.S.	Remove and dispose existing 8" valve, install		
				new supplied 8" valve and valve box		
11		1	L.S.	Furnish materials for final grading, fertilization,		
				seeding, mulching, blanketing, and paving		
1J		1	L.S.	Demobilization		
* DEC	CDIDTION				CLIDTOTAL	

\* DESCRIPTION:

SUBTOTAL

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.

# 2023 Water Connection from Summer Drive to Fox Chase Drive 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".

Χ	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.)
Χ	Delivery tickets for all materials.
	CS-4171 Certificate of Compliance and/ or TR-465 Daily Bituminous Mixture Certification required for all materials.
	Notify the Municipality5 working days prior to start of project.
Χ	Work to be completed on or before 10/1/2023. After 10/1/2023 Liquidated damages apply at
	the rate of \$ 870.00 per calendar day.
	Roadway to be power broomed by (contractor municipality )prior to start of project.
Χ	Excess material to be removed by (contractor X municipality .)
Χ	Municipality to inspect project.
	Need Bill of Lading for each shipment of bituminous material per Section 702.1(c) of Specifications 408.
	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.
	Bituminous Seal on all abutting pavement and curbs required.
	Saw cut or Milled Paving Notch required and incidental to paving item unless noted otherwise.
	Scratch/ Leveling Courses to be placed at the discretion of appointed inspector(s).
	Full width pavement with one pass required.
	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.
Y	Incidental Preparation and clean up required. (Project Construction Materials)
^	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.
	·
v	Provide design, which meets Specifications Form 408 to the municipality 5 days prior to start of work.
۸	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.
Χ	Notice to Proceed will be the date of Contract acceptance.
	Final Completion Certificate & Notice of Completion required.
	Future award of Contract will be based on quality of work as determined by the municipality.
Χ	Contractor, notify all residents of pending work to be performed.
Χ	Contractor shall provide all equipment, labor, & fuel to complete project.
Χ	Contractor shall use township supplied pipe, lube, fittings, rubbers, valve, valve box, aggregate, and bituminous material.
Χ	Work shall be completed weekdays between 7 A.M. and 5 P.M.
Χ	Contractor shall properly dispose of exsiting 8" transite pipe provide Dover Township the required manifest. Dispose of dirt.
Χ	Contractor shall perform pressure, chorine residual, and bacteria testing per Township specs, section 02653. (5) pages att
Χ	Final paving should match exsiting thickness and type. All joints are to be sealed.
	Backfill shall be compacted to 95%, Contractor shall furnish and install blanketing on slopes greater than 3:1.
	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 Municipality's Representative Date
	Dover Township, 2nd Class
	Company Municipality

#### PROPOSAL AND CONTRACT INSTRUCTIONS- FORM 944

- 1 The proposal must be typewritten or printed.
- 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."
- 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.
- 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.")
- 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.
- \*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)



TITLE:

#### 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 forebearance 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) **PLACE** Attest / Witness: SEAL CONTRACTOR **HERE** BY TITLE: TITLE: Attest / Witness: **PLACE SURETY COMPANY** SEAL HERE TITLE:



KNOW ALL MEN BY THESE PR	ESENTS, that we
as PRINCIPAL and a corporation incorporated under the laws held and firmly bond unto the(\$	s of the State of as SURETY, are, in the full and just sum of)dollars, lawful money of the
United States of America, to be paid to the payment well and truly to be made, we bit successors and assigns, jointly and several part of the payment with the payment of t	ne said or its assigns, to which ind ourselves, our heirs, executors, administrators,
	Principal has entered into a contract with the above earing even date herewith, for the improvement of a id Municipality consisting of:
for approximately the sum of:	(\$ ) dollars.
PRINCIPAL shall and will promptly pay of due by contract or otherwise, to any indiving material furnished or labor supplied or persaid for material or labor entered into and equipment used and services rendered be such work, then this obligation to be void. The PRINCIPAL and SURETY, he that any individual firm, partnership, assofurnished material in the prosecution of the been paid in full therefor, may sue in asseand may prosecute the same to final for shave execution thereon. Provided, however, any costs of expenses of such suit.  RECOVERY by any individual, firm be subject to the provisions of the "Public approved December 20, 1967,P.L. 869, whereof, as fully and completely as though It is further provided that any alter in the work to be done or materials to be the giving by the Obligee of any extension forebearance on the part of either the Obrelease the PRINCIPAL and the SURETY forebearance being hereby waived.  IN WITNESS WHEREOF, the sai	on of this obligation is such that if the above bounden in cause to be paid in full all sums of money which may be ridual, firm, partnership, association or corporation, for all enformed in the prosecution of the work, whether or not the dispersion of the work and for rental of the by public utilities in, or in connection with the prosecution of the work is to remain in full force and effect. The eneby, jointly and severally, agree with the Obligee herein work as provided, and any public utility which has not the work as provided, and any public utility which has not the work as provided, and any public utility which has not the such sum or sums as may be justly due him, them or it, and wer, that the Obligee shall not be liable for the payment of the works Contractors' Bond Law of 1967", Act No. 385, which Act shall be incorporated herein and made a part is its provisions were fully and at length herein recited. The retains which may be made in the terms of the contract or furnished or labor to be supplied or performed under it or not time for the performance of the contract or any other for the Principal to the other, shall not in any way or SURETIES of any such alteration, extension of the Principal to the other, shall not in any way or SURETIES of any such alteration, extension of the PRINCIPAL and SURETY have duly executed this Bond and of the payment and the paym
PLACE SEAL HERE WITNESS:	CONTRACTOR
TITLE	BY:
PLACE SEAL HERE	SURETY COMPANY
TITLE:	TITLE:

Attachment 4



#### **AFFIDAVIT RE**

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

State of		) ) ) ss:		
County of	!	)	worn according to law deposes	
accepted t	he provisions of the Workmen's Compensat	tion Act of 19	915 of the Commonwealth of P	it has ennsylvania, with
its supplen	nents and amendments, and have insured the	his heir liability t its	hereunder in accordance with t	the terms of said
Act with	(SURET	Y COMPAN	Y)	·
			( TYPE OR PRINT)	CONTRACTOR
		ВҮ	SIGNA	TURE
	Sworn to and subscribed before me this _	day of	A.D. 20	·
			SIGNA	TURE
			My Commission Expires	( DATE )

D-7126 (7-09)

#### **ANTI-COLLUSION AFFIDAVIT**

		County	York
	pennsylvania  DEPARTMENT OF TRANSPORTATION	Municipality	Dover Township, 2nd Class
	•	Project Number	
State of County of		Fed. Project No.	If Applicable )
ounty of	The undersigned deponent dep	poses and says that he is the	
of the		Company; that he is	authorized to make this
affidavit on b	ehalf of said company in complia	nce with section 102.06 (e) of D	Department Specifications,
Publication 4	108, as amended and that the said	d company has not, either direc	tly or indirectly, entered
into any agre	eement, participated in any collus	ion, or otherwise taken any acti	on in restraint of free
competitive b	oidding in connection with such co	ontract.	
	··········	(Contractor	()
	BY		
	Sworn to and subscribed bet	fore me the undersigned nota	ry public this
	day of	,	
		Notary Public	
	My Comm	ission expires	



Dover Township, 2nd Class MUNICIPALITY

#### **NOTICE OF COMPLETION**

IN I	REFERENCE TO PROJECT #
Name of Contracto	r
final pavement ins <sub>l</sub>	ork as specified on the above numbered contract is completed and pection has been made by the contractor and municipality in see terms of the contract awarded.
DATE OF AWARD	
	Signature of Municipality
	Signature of Contractor
Both copies of this for pavement restoration	orm to be filled by the Contractor-Municipality on completion of final n.
	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.
*DATE	Authorized Agent for the Municipality
* The contractor is period of one year	responsible for maintenance of permanent pavement repairs for a from this date.

CS-4171 (11-09)



#### **CERTIFICATE OF COMPLIANCE**

1.	<b>♦COUNTY:</b> ( <b>♦</b> - To b	e completed by the	◆LR/SR:_ party that will sh	•: ip the material t	SEC/SEC to the pro	3: oject, otherwi	◆ECMS#:se leave blank.)
2.	I / WE hereby certify	that the material lis	sted on line 5 wa	s:			
	☐ Manufactured	☐ Fabricated	☐ Coated	Precasted	d 🗆 F	Produced	
	By(Name	of Manufacturer, Fabrica	ator, Coater, Precaste	er or Producer)	endersendrynse sussepteme soor derseg	State description of the state	(Supplier Code)
3.	and the party listed a	above certifies that	the material(s) o	n line 5 meets t	he requir	ements of	
	Publication 408, Se				•		
	•	( )					
4.							
7.	The material listed b	elow is being sinpp	red to		(Co	ompany Name)	
5.	LOT NO.	QUANTITY					BULLETIN # 14 or 15 IST HMA / PCC JMF.
6. 7.	CHECK HERE IF Certification Form(s) processes including are maintaining copy not covered by Buy VENDOR CLASSIF #1 Manufacture	F YOUR PRODUCT from the manufact coatings applicatio (s), in our files in a America, the application ICATION (CHECK er, Fabricator, Coalletin # 15, or Product, 41 or 42	r CONTAINS IRC urer(s) of any ste n (e.g epoxy, ga ccordance with S ation of these ma ONE BLOCK ON ater, Precaster lucer Listed in	ON OR STEEL eel or iron mater lavanizing, or pa Section 106.03(t sterials on steel NLY) -	I / WE ce rials cont inting) had b)3. Not or iron m stributor t Listed so, com	rtify that we ained in our ave occurred e: While coanust occur in grant of the coanust occur in grant of the coanust occur in grant of the coanus of the coa	or * <u>Private Label Company</u>
	best of my knowledg the product(s) listed.		ately describe	provided to ι quantities lis	ıs by the	manufacture	er listed on this document and
8.	NAME (print) :				TITLE:	······································	
	COMPANY NAME:						
	SIGNATURE : By Res	sponsible Company Offic	cial (QC Staff only if	you checked bloc	k #1 on lin	DATE:	
9.	List company that so (Complete if you che			above: e leave blank.)		(Company	v Name)
	After completing the of the Certificate of 0	Certificate of Comp Compliance form m rom other companionation. The	oliance form CS- ust accompany y es related to Pen ese files must be	4171, maintain t our material shi nDOT projects, available for in	the origin pment to the acco	al at your co its next des impanying C and verifical	mpany's location. A copy tination. Also, if you receive ertificate of Compliance forms ion by a Department

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

#### CONSTRUCTION SEQUENCE

•All EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE E&S PLANS. A COPY OF THE E&S PLANS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES

•ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUEUNCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING, GRUBBING, TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE. ANY DEVIATION FROM THE FOLLOWING SEQUENCE MUST BE APPROVED IN WRITTING FROM THE ENGINEER.

- 1. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMAKRED, THE PENNSYLVANNIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING **UNDERGROUND UTILITIES**
- 2. THE OWNER SHALL FIELD MARK THE LIMITS OF DISTURBANCE FOR ALL WORK AND ALL WATERS OF THE COMMONWEALTH BOUNDARIES (EX. STREAM BUFFERS, WETLANDS BOUNDARIES, SPRING SEEPS, AND FLOODWAY) PRIOR TO THE START OF
- 3. THE CONTRACTOR SHALL INSTALL PERIMETER EROSION AND SEDIMENTATION CONTROLS AS SHOWN ON THE DRAWINGS 4. INSTALL ALL WATER MAIN
- 5. IN AREAS OF VEGETATED SURFACE CONVERAGE, THE CONTRACTOR SHALL BEGIN TRENCHING BY STRIPPING OFF THE TOPSOIL AND PLACING IT SEPARATE OF ANY SUBGRADE MATERIALTO BE USED AS BACKFILL. ALL MATERIAL SHALL BE PILED ON THE UPSLOPE SIDE OF THE TRENCH AND RETURNED TO THE TRENCH UPON COMPLETION OF WATER MAIN INSTALLATION. ANY EXCESS SUBGRADE MATERIAL SHALL BE PLACED IN DUMP TRUCKS AND TAKEN OFF SITE. THE STRIPPPED TOPSOIL SHALL BE RESTORED TO ITS ORIGINAL
- DEPTH, BUT NOT LESS THAN FOUR INCHES, AND FREE OF ANY STONES GREATER THAN 2 INCHES 6. AT THE END OF EACH WORKING DAY, AREAS DISTURBED FOR TRENCH EXCAVATIONS MUST BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING
- 7. THE CONTRACTOR SHALL KEEP ALL PERIMETER EROSION AND SEDIMENTATION CONTROL MEASURES IN PLACE UNTIL 70% STABILIZATION IS CONFIRMED BY THE ENGINEER. UNTIL THIS IS CONFIRMED THE CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT AND MAINTAIL ALL DISTURBED AREAS AND SOIL EROSION AND SEDIMENTATION CONTROLS, TO INCLUDE CHECKING THE INTEGRITY OF THE TEMPORARY MATTING, AND REPAIRING ANY EROSION
- 8. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE

OWNER AND/OR OPERATOR SHALL CONTACT THE ENGINEER FOR REMOVAL OF THE E&S BMPS

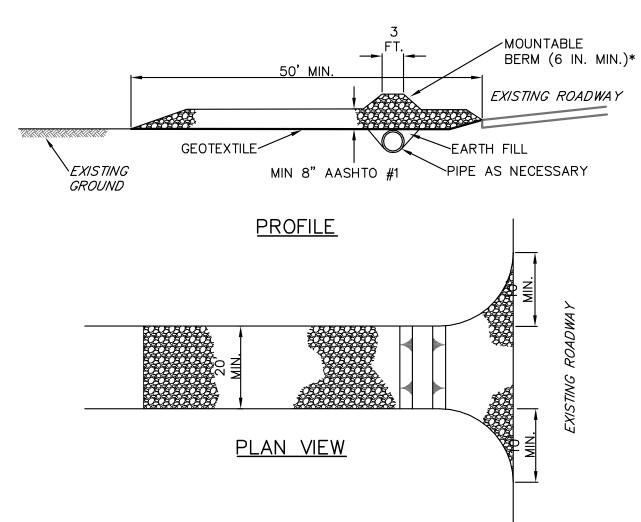
THE ORDER OF THE ABOVE SCHEDULE IS SUBJECT TO CHANGE. ANY CHANGES SHOULD BE MADE UNDER DIRECT SUPERVISION OF THE ENGINEER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE ENGINEER 72 HOURS PRIOR TO CONSTRUCTION AND 72 HOURS PRIOR TO LEAVING THE SITE.

#### C.S. DAVIDSON, INC. 38 NORTH DUKE STREET

#### YORK, PA 17401 (717)846-4805

#### **GENERAL NOTES**

- 1. A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLANS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE ENGINEER SHALL BE NOTIFIED OF ANY CHANGES TO THE EROSION AND SEDIMENTAITON CONTROL PLANS PRIOR TO THE IMPLEMENTATION OF THOSE CHANGES
- 2. ALL STOCKPILING OF TOPSOIL AND EXCAVATED MATERIALS SHALL BE TEMPORARILY STOCKPILED ON THE UPSTREAM (SOUTH) SIDE OF THE TRENCH AS SHOWN ON THE PLANS.



#### \* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

TO ENTERING ROCK CONSTRUCTION ENTRANCE.

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

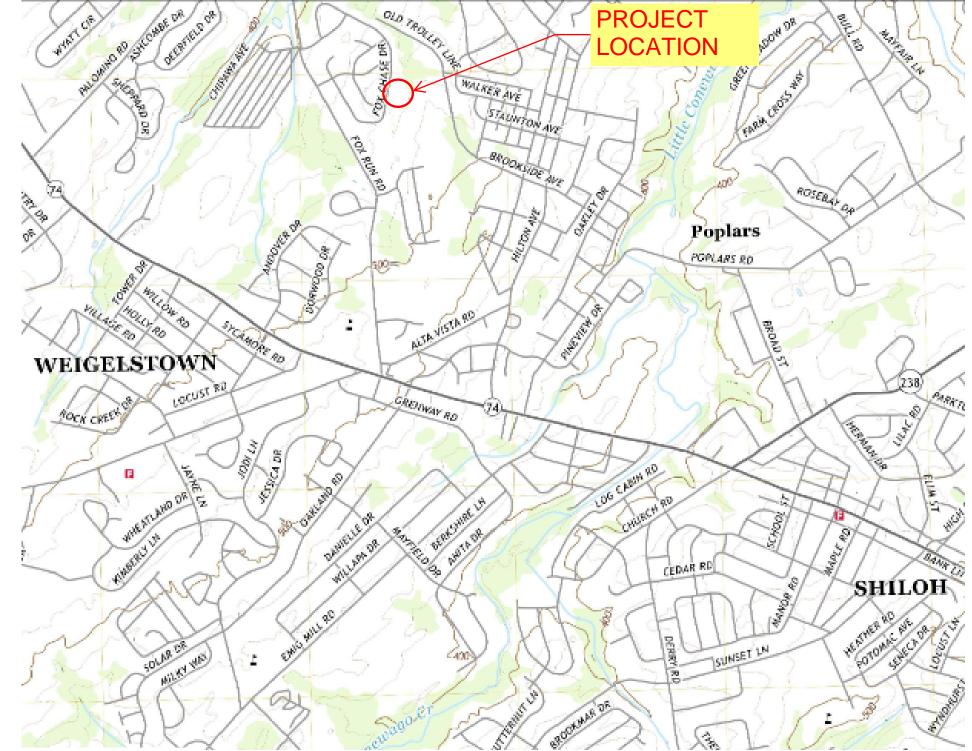
#### STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE

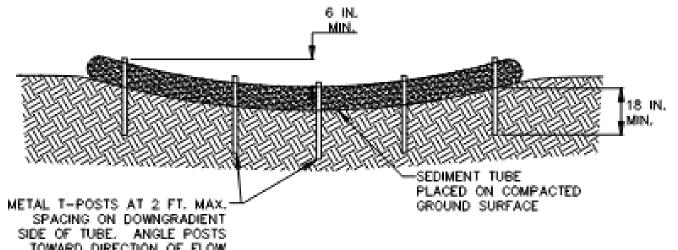
NOT TO SCALE

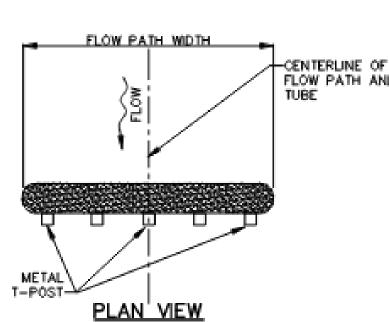
# **EROSION & SEDIMENTATION** CONTROL PLANS

# DOVER TOWNSHIP

# WATER MAIN CONNECTION BETWEEN SUMMER DRIVE AND FOX CHASE DRIVE







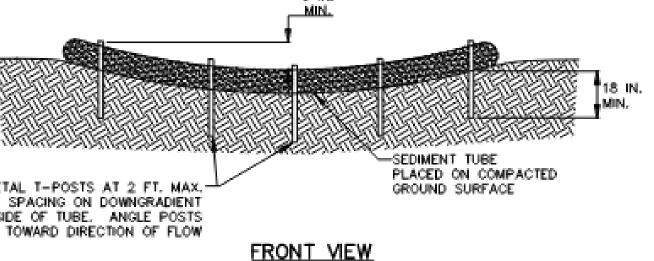
THIS DETAIL APPLICABLE TO FLOW PATHS WITH WIDTHS LESS THAN OR EQUAL TO ONE TUBE

METAL T-POSTS SHALL BE INSTALLED AT THE CENTER AND AT EACH END OF THE TUBE. ADDITIONAL T-POSTS SHALL BE INSTALLED AS NEEDED TO MEET THE MAXIMUM 2-FOOT SPACING.

SEDIMENT TUBES SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE TUBE AND DISPOSED AS DIRECTED ELSEWHERE IN THE E&S PLAN.

DAMAGED TUBES SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION. A SUPPLY OF TUBES SHALL BE KEPT ON SITE FOR THIS PURPOSE.

STANDARD CONSTRUCTION DETAIL #4-4 WEIGHTED SEDIMENT FILTER TUBE INSTALLATION CONCENTRATED FLOW AREA



# FLOW PATH AND

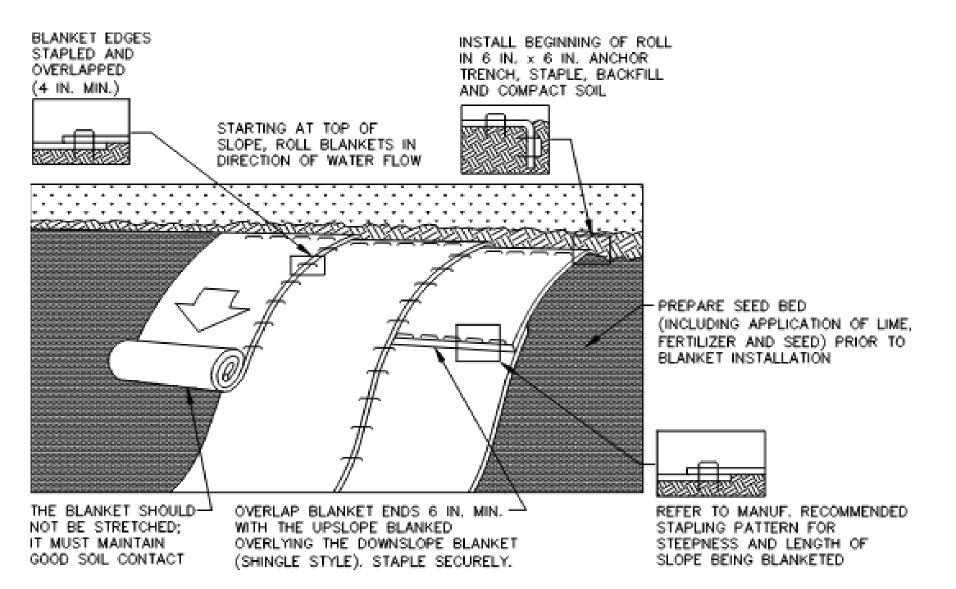
#### SEEDING RESTORATION TABLE

RESTORATION CONDITION	TOPSOIL	LIME*	BASIC <u>FERTILIZER</u>	STARTER FERTILIZER	SEED MIX & SOWING RATE (% BY WEIGHT)					
TEMPORARY (PENNDOT E)	N/A	1 TON/ACRE	5-5-5 1000#/ACRE	N/A	100% ANNUAL RYEGRASS SOW 10# PER 1,000 SQ.YDS. MARCH 15 THROUGH OCTOBER 15					
PERMANENT (PENNDOT D)	YES	800# PER 1,000 SQ.YD.	10-20-20 <b>©</b> 140# PER 1,000 SQ.YD.	38-0-0 @ 50# PER 1,000 SQ.YD. <u>QR</u> 31-0-0 @ 61# PER 1,000 SQ.YD.	80% KENTUCKY 31, FESCUE 20% PENNLAWN RED FESCUE SOW 21# PER 1,000 SQ.YDS. MARCH THROUGH MAY/AUGUST THROUGH OCTOBER 15					

MULCH IMMEDIATELY AFTER TEMPORARY AND PERMANENT SEEDING BY PLACING HAY AND STRAW MULCH IN A CONTINUOUS BLANKET AT A MINIMUM RATE OF 1,200 POUNDS PER 1,000 SQUARE YARDS.

UNLESS A LESSER RATE INDICATED BY SOILS TESTS.

A MINIMUM 4" OF TOPSOIL SHALL BE PLACED ON ALL DISTURBED AREAS TO BE PERMANENTLY REVEGETATED.



COMPOST FILTER SOCK-

FILTER SOCK

BLOWN/PLACED

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE,

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

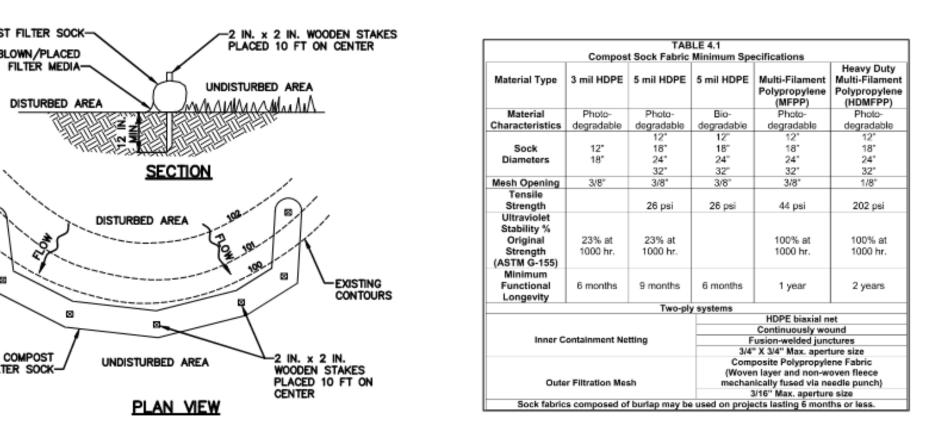
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1

EROSION CONTROL BLANKET INSTALLATION



SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURERS SPECIFICATIONS OR BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURERS RECOMMENDATIONS.

SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1

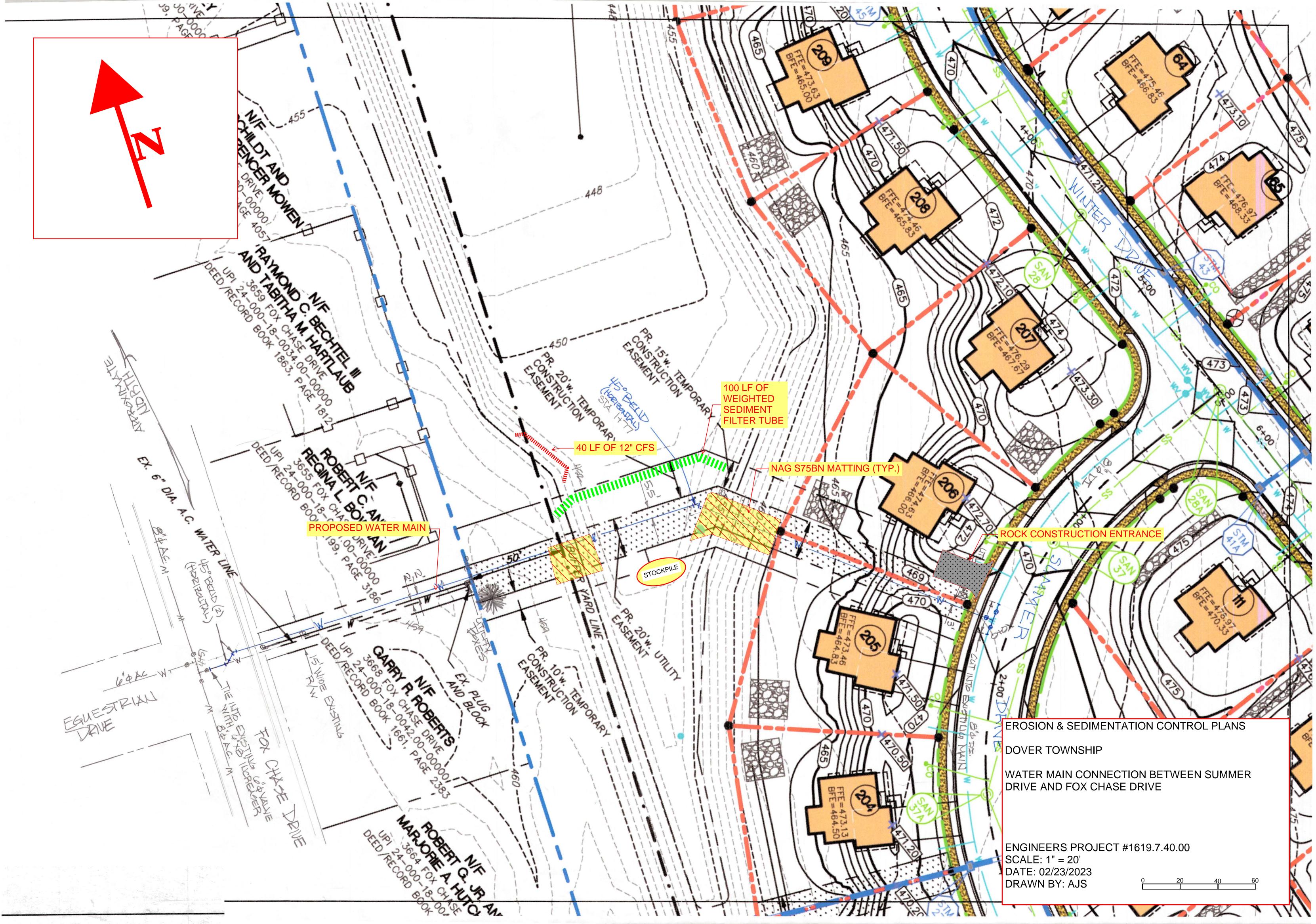
COMPOST FILTER SOCK

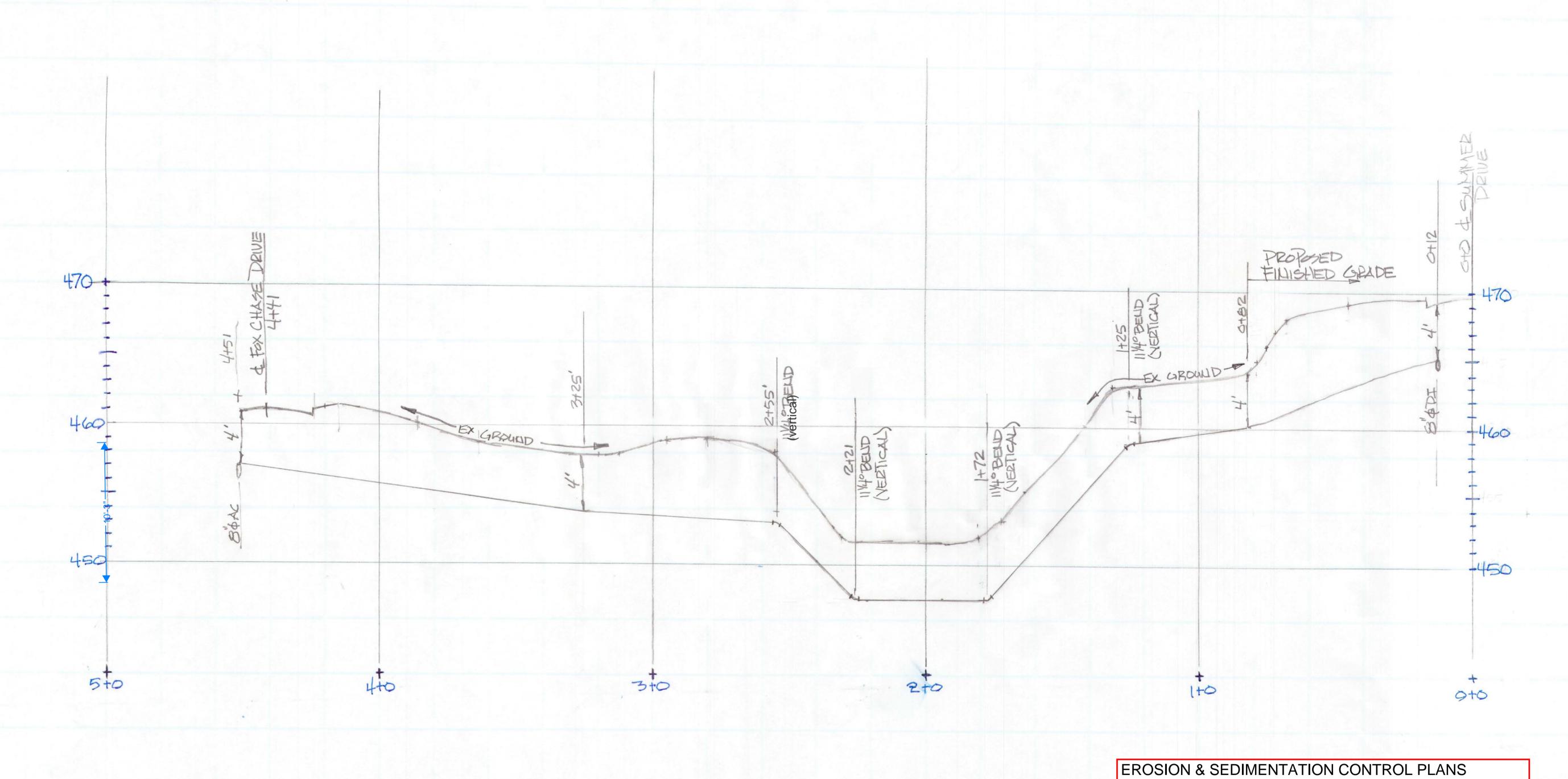
Fibrous and elongated 5.5 - 8.5Moisture Conten 30% - 80% Particle Size 30% - 50% pass through 3/8" seive 5.0 dS/m (mmhos/cm) Maximum

TABLE 4.2 Compost Standard:

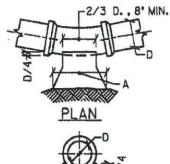
ENGINEERS PROJECT #1619.7.40.00 SCALE: 1" = 20'

DATE: 02/23/2023 DRAWN BY: AJS





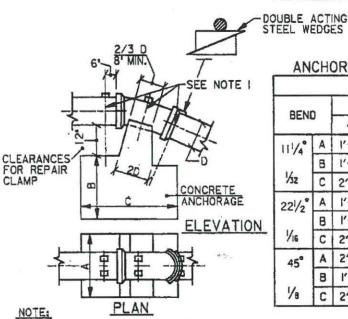
# DOVER TOWNSHIP WATER MAIN CONNECTION BETWEEN SUMMER DRIVE AND FOX CHASE DRIVE ENGINEERS PROJECT #1619.7.40.00 SCALE: HORZ: 1' = 20' VERT 1" = 4' DATE: 02/23/2023 DRAWN BY: AJS VERT 1 4 8 12



# B SECTION

#### BUTTRESS FOR VERTICAL BENDS

		BL	TTRES:	DIMEN	ISIONS		
DENI				SI	ZE		
BEND		4*	6'	В"	10"	12'	16'
111/4"	A	4"	- 6'	8*	104	1'-0"	1'-4"
100	В	5"	7"	8*	9*	10,	1'-0"
1/32	С	5'	7"	7*	8'	8'	9"
221/2	A	6'	9'	1'-0"	1'-6"	1'-9"	2'-3"
	В	6'	7"	7°	8"	10	1'-0"
1/16	С	6'	7"	7"	8*	8'	9*
45°	A	10"	1'-3"	1'-8"	2'- *	2'-6"	3'-4"
1/8	В	7°	7°	8"	9*	11"	1'-3"
	С	7*	7"	8"	10"	114	1'-3"



#### ANCHORAGE FOR VERTICAL BENDS

		ANG	CHORAG	E DIME	NSIONS					
BEND		SIZE								
		41	6"	8*	10"	12'	16"			
111/4°	A	1'-4"	1'-6'	13-61	2'-6'	3'-0"	4'-0°			
	В	1'-0"	1"-6"	1'-9"	2'-0"	2'-6"	2'-6"			
1/32	С	2'-0"	2'-0'	2'-6"	3'-0"	3'-0"	4'-0"			
221/2°	A	1'-8"	2'-0"	3'-4"	3'-8"	4'-0"	4'-4"			
/2	В	1'-6'	1'-9"	2'-3'	2'-3'	2'-3"	2'-6"			
1/16	С	2'-0"	3'-0"	2'-8'	3'-10"	4'-0"	5'-9"			
45°	A	2'-3"	2'-6'	3'-0"	4'-0"	4'-6"	5'-2"			
	8	1'-9"	2'-6'	2'-9'	3'-0"	3'-6"	4'-0"			
1/8	C	2'-6'	3'-0"	4'-0"	4'-6"	4'-9"	6'-6"			

- I. USE 3 \*6 REINFORCING BARS AS SHOWN, IMBED 30 DIAMETERS IN CONCRETE AND PAINT EXPOSED SURFACE WITH 2 COATS OF APPROVED BITUMINOUS PAINT.
- 2. ALL CONCRETE TO BE CLASS AS SPECIFIED FOR MASS CONCRETE.
- 3. ALL BUTTRESSES TO BE CARRIED TO UNDISTURBED EARTH.
- 4. BUTTRESS DIMENSIONS SHOWN ARE MINIMUM. DIMENSIONS ARE BASED UPON SOIL BEARING PRESSURE OF 3,000 P.S.F. AND STATIC WATER PRESSURE OF 150 P.S.I. WHERE PRESSURE EXCEEDS 150 P.S.I. OR WHERE SOIL BEARING PRESSURE IS LESS THAN 3,000 P.S.F. SPECIAL BUTTRESS DESIGN IS REQUIRED.
- 5. USE DIMENSIONS SHOWN UNDER 4" PIPE FOR ALL PIPES LESS THAN 4" Ø.

NOT TO SCALE

#### DOVER TOWNSHIP CONSTRUCTION & MATERIAL SPECIFICATIONS



Excellence in Civil Engineering

38 N. DUKE STREET YORK, PA • PHONE (717) 846-4505 • FAX (717)846-5811
50 WEST MODUL ST. GETTYSBURG, PA • PHONE (717) 337-3021 • FAX (717) 337-0762
WWW.CSDAMDSON.COM

THRUST BLOCK FOR VERTICAL BENDS

DATE:	6/16/2004
DRAWN BY:	ARB
CHK. BY:	
NO.	5195

#### SECTION 02653 - TESTING AND DISINFECTING WATER MAINS

#### PART 1 - GENERAL

#### 1.1 DESCRIPTION

- A. The Work Of This Section Includes, but is not limited to:
  - 1. Testing water pipeline:
    - a. Hydrostatic pressure testing
    - b. Leakage testing
  - 2. Disinfecting:
    - a. Preliminary flushing
    - b. Chlorine application methods
    - c. Final flushing
    - d. Bacteriological testing
- B. Related Work Specified Elsewhere:
  - 1. Section 02615 Water Mains
  - 2. Section 02640 Valves and Fire Hydrants
  - 3. Section 02642 Water Service Connections

#### 1.2 QUALITY ASSURANCE

A. Testing Agency: Bacteriological testing shall be performed by a testing laboratory approved by DEP, engaged and paid for by the Developer/Contractor; and approved by the Township's Engineer. Samples are to be collected by the testing agency, and results submitted to the Township.

#### B. Referenced Standards:

1. American National Standards Institute (ANSI); American Water Works Association (AWWA):

a. ANSI/AWWA B300

Standard for Hypochlorites

b. ANSI/AWWA B301

Standard for Liquid Chlorine

c. ANSI/AWWA C600

Standard for Installation of Gray and Ductile Cast-Iron Water Mains and Appurtenances,

Section 4, Hydrostatic Testing

d. AWWA C651

Standard for Disinfecting Water Mains

#### C. Test Acceptance:

- No test will be accepted until the results are below the specified maximum limits.
- The Developer/Contractor shall, at his own expense, determine and correct the sources of leakage and retest until successful test results are achieved.

#### D. Final Test Acceptance:

1. See paragraph 2.08.A, Section 01010 - General Requirements.

#### 1.3 SUBMITTALS

- A. Test Procedures: Submit a testing sequence schedule including a list of testing equipment to be used.
- B. Certificates:
  - 1. Submit a Statement of Compliance, together with supporting data, from the materials suppliers attesting that the chlorine form composition provided meets specification requirements.
  - 2. Submit, prior to starting testing, certification attesting that the pressure gauges to be used have been calibrated and are accurate to the degree specified in Part 2, Products.
- C. Test Reports: Submit two copies of the testing laboratory certified test reports of each bacteriological test to the Township.

#### PART 2 - PRODUCTS

#### 2.1 HYDROSTATIC TEST EQUIPMENT

- A. Hydro pump
- B. Pressure hose
- C. Test connections
- D. Water meter
- E. Pressure gauge, calibrated to 0.1 lb./sq.in.
- F. Pressure relief valve

#### 2.2 DISINFECTING CHEMICALS

A. Liquid chlorine, calcium hypochlorite, or sodium hypochlorite conforming to ANSI/AWWA Standards B300 and B301.

#### 2.3 ADHESIVE

A. Food - grade adhesive such as Permatex Form-A - Gasket No. 2 and Permatex Clear RTV Silicone Adhesive Sealant manufactured by Loctite Corporation, Kansas City, KS or approved equal.

#### **PART 3 - EXECUTION**

#### 3.1 PREPARATION

- A. Backfill trenches in accordance with Section 02221.
- B. Provide the water line under test with reaction thrust blocking; hydrostatic testing shall not begin until the concrete thrust blocking has set; allow 2000 psi 28-day strength concrete to set (cure) for a minimum of 7 days prior to testing; if High Early Strength 3,000 psi 3-day strength concrete is used, hydrostatic testing may not begin until the concrete has set a minimum of 2 days.

- C. Provide pumps, piping, tanks, connections, polyurethane pigs, and appurtenances at no additional expense to the Owner. Owner will provide the necessary water for testing. Water for retests that result from failure of the initial test will be at the expense of the Contractor.
- D. Provide 48 hours advance notification to the Township Engineer of scheduled pressure and leakage testing. No testing is to be performed unless air temperature is 35°F or higher.

#### 3.2 TESTING WATER LINES

A. Hydrostatic Testing: Test each newly installed section of water line by hydrostatic test procedure in accordance with the recommended practice established by AWWA, Standard C600, Section 4, hydrostatic testing, as modified herein below.

#### 1. Pressure Test:

- a. Conduct pressure tests for a period of not less than 2 hours at 150 psig or at a pressure of not less than 1.25 times the working pressure based upon the elevation of the lowest point in line under test corrected to the elevation of the test gauge, but shall not exceed 150 psi.
- B. Observe joints, fittings and valves under test; remove and renew cracked pipe, joints, fittings, and valves showing visible leakage; retest.
  - 1. Leakage Testing:
    - a. Conduct the leakage test concurrently with the pressure test for the 2-hour period at the specified test pressure.
    - b. Water pipe installation is deemed to have failed the leakage test if the leakage obtained is greater than that determined by the formula or the leakage exceeds 10 gal per inch pipe diameter in 24 hours.

$$L = ND(P)^{0.5}/7400$$

Where:

L is allowable leakage in gallons/hour

N is number of joints in the section tested

D is nominal diameter of pipe in inches

P is average test pressure in pounds per square inch gauge

- c. If the line under test contains sections of various diameters, the allowable leakage shall be the sum of the computed leakage for each size.
- d. If test results indicate that the pipe has leakage greater than specified, locate and repair the defective joints, fittings, pipe or valves and retest until leakage is within allowable limits; repair visible leaks regardless of the amount of leakage.

#### 3.3 DISINFECTION

#### A. General:

- After completion of satisfactory pressure and leakage testing, disinfect the water lines in accordance with the recommended practice established in AWWA Standard C651; conduct water line disinfection in the following steps:
  - a. Preliminary flushing
  - b. Chlorine application
  - c. Final flushing
  - d. Bacteriological tests

- B. During construction, place calcium hypochlorite granules at the upstream end of the first section of pipe, at the upstream end of each branch main and at 500-ft. intervals. (Refer to Table 1 at the end of this section for quantity of granules to be used.)
  - 1. <u>CAUTION</u>: This procedure must not be used on solvent welded plastic or on screwed joint steel pipe because of the danger of fire or explosion from the reaction of the joint compounds with the calcium hypochlorite.
- C. Preliminary Flushing Use one of the following two methods:
  - 1. Prior to disinfection, except when the tablet method is used, flush the line with pipe cleaning plugs or "pigs"; these "pigs" shall be polyurethane blown elastomer foam bullets hydraulically propelled; the "pig" shall have the ability to negotiate fabricated mitered bends and short radius elbows and pass through tees, crosses, and multi-dimensional sizes of pipe and valves; the "pigs" shall be approved for use in potable water systems by governing regulatory agency; dispose of flushing water used with "pigs".
  - 2. Prior to disinfection, except when the tablet method is used, the main shall be filled to eliminate air pockets and shall be flushed to remove particulates; the flushing velocity in the main shall be not less than 2.5 fps unless the Township Engineer determines that conditions do not permit the required flow to be discharged to waste; (Refer to Table 3 at the end of this section for the rates of flow to produce a velocity of 2.5 fps in pipes of various sizes.) Flushing water shall be safely disposed of in a manner acceptable to the governing regulatory agency.
- D. Chlorine Form: The chlorine form to be applied to the system shall be either liquid chlorine, calcium hypochlorite or sodium hypochlorite; the Township Engineer's written approval of the chlorine form to be used is required.

#### E. Chlorine Application:

#### 1. Tablet Method:

- a. <u>CAUTION</u>: The tablet method cannot be used unless the main is kept clean and dry during construction because the preliminary flushing step must be eliminated; do not use the tablet method in mains having diameters over 24 in.
- b. During construction, place 5g calcium hypochlorite tablets in each section of pipe and place one such tablet in each hydrant, hydrant branch and other appurtenances to achieve the required dose of 25 mg/l available chlorine; (Refer to Table 2 at the end of this section for the proper number of 5g calcium hypochlorite tablets needed.) attach all the tablets inside and at the top of the main with an adhesive; there shall be no adhesive on the tablet except on the broad side attached to the surface of the pipe; attach the tablets before the pipe section is placed in the trench and mark their position on the section so it can be readily determined that the pipe is installed with the tablets at the top.
- c. When pipeline installation is completed, fill the main with water at a rate such that water within the main will flow at a velocity not greater than 1 fps; retain the water in the pipe for 24 hours; if the water temperature is less than 41°F, retain the water in the pipe for at least 48 hours; position valves so that the strong chlorine solution in the main being treated will not flow into water mains in active service.

#### 2. Continuous Feed Method:

- a. The continuous feed method consists of placing calcium hypochlorite granules in the main during construction (at the option of the Township Engineer), completely filling the main to remove all air pockets, flushing the completed main to remove particulates and filling the main with potable water chlorinated so that after a 24-hour holding period in the main there will be a free chlorine residual of not less than 10 mg/l.
- b. At a point not more than 10 feet downstream from the beginning of the new main, water entering the

new main shall receive a dose of chlorine fed at a constant rate such that the water entering the new main will not have less than 25 mg/l free chlorine; assure this concentration is provided by measuring chlorine concentration; Township Engineer shall approve of the method before proceeding with disinfection.

- c. During the application of chlorine, position valves so that the strong chlorine solution in the main being treated will not flow into water mains in active service.
- d. Retain the chlorinated water in the main for a 24-hour period. During the 24-hour treatment, operate valves, curb stops and hydrants in order to disinfect appurtenances and pipe branches; at the end of this 24-hour period, the treated water in all portions of the main shall have a residual of not less than 10 mg/l of free chlorine, as determined by a certified testing laboratory.

#### F. Final Flushing:

- 1. Flush the heavily chlorinated water from the system under treatment until the chlorine concentration in the water leaving the system is no higher than that generally prevailing in the system or is acceptable for domestic use.
- 2. Comply with Federal, State and local laws when discharging the flushed chlorine solution.

#### G. Bacteriological Testing:

- After final flushing is completed and before the water main is placed in service, test the line for bacteriological quality.
- Collect a minimum of one sample at the end of each new main for each test, and one sample of the incoming water from the existing water system for comparison.
- 3. Collect samples in sterile bottles treated with sodium thiosulfate.
- 4. Sampling tap shall consist of corporation stop installed in the main with copper tube gooseneck assembly through which a portion of the chlorinated water has been allowed to flow; sterilize the tap, valves and pipe in a manner similar to the sterilization of the main; do not use hose or fire hydrant to collect samples.
- 5. Provide bacteriological test reports to the Township Engineer; failure to meet State health standard requirements will be cause for the Developer/Contractor to rechlorinate and retest the system.
- 6. If trench water has entered the main, or if, in the opinion of the Township Engineer, excessive quantities of dirt or debris have entered the main, take bacteriological samples at intervals of approximately 200 ft. from the water that has stood in the main for at least 16 hours after final flushing has been completed.

SEE ATTACHED TABLES

END OF SECTION

Project Name:	Fox Chase Dr and Summer Dr water connection
Awarding Agency:	Dover Township
Contract Award Date:	5/1/2023
Serial Number:	23-01479
Project Classification:	Highway
Determination Date:	2/15/2023
Assigned Field Office:	Harrisburg
Field Office Phone Number:	(717)787-4763
Toll Free Phone Number:	(800)932-0665
Project County:	York County

Commonwealth of Pennsylvania Report Date: 2/15/2023

Project: 23-01479 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	6/28/2021		\$35.80	\$28.26	\$64.06
Asbestos & Insulation Workers	7/27/2022		\$35.80	\$30.01	\$65.81
Asbestos & Insulation Workers	6/26/2023		\$35.80	\$32.01	\$67.81
Asbestos & Insulation Workers	7/1/2024		\$35.80	\$34.06	\$69.86
Boilermaker (Commercial, Institutional, and Minor Repair Work)	1/1/2019		\$29.26	\$18.48	\$47.74
Boilermakers	1/1/2021		\$49.32	\$34.90	\$84.22
Boilermakers	1/1/2022		\$50.17	\$35.30	\$85.47
Boilermakers	1/1/2023		\$51.27	\$35.30	\$86.57
Bricklayer (Pointer, Cleaner, Caulker, Cement Mason, Plasterer, Tile Setter)	5/1/2022		\$36.37	\$18.18	\$54.55
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/1/2021		\$34.62	\$17.78	\$52.40
Bricklayers, Stone Masons, Pointers, Caulkers, Cleaners	5/1/2022		\$36.37	\$18.18	\$54.55
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, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2021		\$31.77	\$17.41	\$49.18
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2022		\$33.56	\$17.72	\$51.28
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	5/2/2021		\$27.25	\$20.25	\$47.50
Cement Finishers & Plasterers	5/1/2022		\$29.38	\$20.98	\$50.36
Cement Finishers	5/1/2017		\$28.05	\$21.30	\$49.35
Cement Masons	5/1/2021		\$30.70	\$22.85	\$53.55
Cement Masons	5/1/2022		\$31.75	\$22.85	\$54.60
Drywall Finisher	5/1/2021		\$29.65	\$20.74	\$50.39
Drywall Finisher	5/1/2022		\$29.81	\$21.43	\$51.24
Electricians	6/1/2021		\$33.50	\$25.94	\$59.44
Electricians	6/1/2022		\$35.25	\$26.31	\$61.56
Electricians	6/1/2023		\$35.25	\$28.41	\$63.66
Electricians	6/1/2024		\$35.25	\$30.51	\$65.76
Electricians	6/1/2025		\$35.25	\$32.50	\$67.75
Electricians	6/1/2026		\$35.25	\$34.43	\$69.68
Elevator Constructor	1/1/2021		\$49.95	\$40.35	\$90.30
Elevator Constructor	1/1/2022		\$51.66	\$37.48	\$89.14
Elevator Constructor	1/1/2023		\$53.93	\$38.34	\$92.27
Glazier	5/1/2021		\$25.63	\$13.45	\$39.08
Glazier	5/1/2022		\$31.23	\$19.26	\$50.49
Glazier	5/1/2023		\$31.23	\$20.66	\$51.89

Project: 23-01479 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	7/1/2021		\$34.01	\$31.13	\$65.14
Laborers (Class 01 - See notes)	5/1/2021		\$23.01	\$16.03	\$39.04
Laborers (Class 01 - See notes)	5/1/2022		\$23.35	\$17.18	\$40.53
Laborers (Class 02 - See notes)	5/1/2021		\$25.01	\$16.03	\$41.04
Laborers (Class 02 - See notes)	5/1/2022		\$25.35	\$17.18	\$42.53
Laborers (Class 03 - See notes)	5/2/2021		\$26.07	\$16.02	\$42.09
Laborers (Class 03 - See notes)	5/1/2022		\$28.21	\$17.18	\$45.39
Laborers (Class 03 - See notes)	4/30/2023		\$27.42	\$17.32	\$44.74
Laborers (Class 04 - See notes)	5/2/2021		\$27.37	\$16.03	\$43.40
Laborers (Class 04 - See notes)	5/1/2022		\$25.35	\$17.18	\$42.53
Laborers (Class 04 - See notes)	4/30/2023		\$28.92	\$17.32	\$46.24
Laborers (Class 05 - See notes)	5/2/2021		\$28.07	\$16.02	\$44.09
Laborers (Class 05 - See notes)	5/1/2022		\$28.77	\$16.62	\$45.39
Laborers (Class 05 - See notes)	5/1/2022		\$28.32	\$16.84	\$45.16
Laborers (Class 05 - See notes)	4/30/2023		\$29.42	\$17.32	\$46.74
Laborers (Class 06 - See notes)	5/1/2021		\$25.01	\$16.03	\$41.04
Laborers (Class 06 - See notes)	5/1/2022		\$25.26	\$16.84	\$42.10
Marble Mason	5/1/2021		\$31.55	\$17.34	\$48.89
Marble Mason	5/1/2022		\$32.85	\$17.74	\$50.59
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	5/1/2020		\$36.04	\$19.31	\$55.35
Operators (Building, Class 01 - See Notes)	5/1/2021		\$39.87	\$27.94	\$67.81
Operators (Building, Class 01 - See Notes)	5/1/2022		\$41.41	\$28.40	\$69.81
Operators (Building, Class 01 - See Notes)	5/1/2023		\$42.57	\$29.24	\$71.81
Operators (Building, Class 01A - See Notes)	5/1/2021		\$42.12	\$28.60	\$70.72
Operators (Building, Class 01A - See Notes)	5/1/2022		\$43.66	\$29.06	\$72.72
Operators (Building, Class 01A - See Notes)	5/1/2023		\$44.82	\$29.90	\$74.72
Operators (Building, Class 02 - See Notes)	5/1/2021		\$39.59	\$27.85	\$67.44
Operators (Building, Class 02 - See Notes)	5/1/2022		\$41.13	\$28.31	\$69.44
Operators (Building, Class 02 - See Notes)	5/1/2023		\$42.29	\$29.15	\$71.44
Operators (Building, Class 02A - See Notes)	5/1/2021		\$41.84	\$28.52	\$70.36
Operators (Building, Class 02A - See Notes)	5/1/2022		\$43.38	\$28.98	\$72.36
Operators (Building, Class 02A - See Notes)	5/1/2023		\$44.54	\$29.82	\$74.36
Operators (Building, Class 03 - See Notes)	5/1/2021		\$36.87	\$27.04	\$63.91
Operators (Building, Class 03 - See Notes)	5/1/2022		\$38.41	\$27.50	\$65.91
Operators (Building, Class 03 - See Notes)	5/1/2023		\$39.57	\$28.34	\$67.91
Operators (Building, Class 04 - See Notes)	5/1/2021		\$35.72	\$26.72	\$62.44
Operators (Building, Class 04 - See Notes)	5/1/2022		\$37.27	\$27.17	\$64.44
Operators (Building, Class 04 - See Notes)	5/1/2023		\$38.42	\$28.02	\$66.44
Operators (Building, Class 05 - See Notes)	5/1/2021		\$35.27	\$26.59	\$61.86
Operators (Building, Class 05 - See Notes)	5/1/2022		\$36.82	\$27.04	\$63.86
Operators (Building, Class 05 - See Notes)	5/1/2023		\$37.97	\$27.89	\$65.86

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Project: 23-01479 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Building, Class 06 - See Notes)	5/1/2021		\$34.40	\$26.32	\$60.72
Operators (Building, Class 06 - See Notes)	5/1/2022		\$35.95	\$26.77	\$62.72
Operators (Building, Class 06 - See Notes)	5/1/2023		\$37.10	\$27.62	\$64.72
Operators (Building, Class 07A- See Notes)	5/1/2021		\$48.31	\$31.86	\$80.17
Operators (Building, Class 07A- See Notes)	5/1/2022		\$50.17	\$32.40	\$82.57
Operators (Building, Class 07A- See Notes)	5/1/2023		\$51.63	\$33.34	\$84.97
Operators (Building, Class 07B- See Notes)	5/1/2021		\$47.96	\$31.77	\$79.73
Operators (Building, Class 07B- See Notes)	5/1/2022		\$49.81	\$32.31	\$82.12
Operators (Building, Class 07B- See Notes)	5/1/2023		\$51.28	\$33.24	\$84.52
Painters Class 1 (see notes)	5/1/2021		\$25.84	\$16.50	\$42.34
Painters Class 1 (see notes)	5/1/2022		\$26.42	\$17.03	\$43.45
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)	1/1/2021		\$54.75	\$20.10	\$74.85
Pile Driver Divers (Building, Heavy, Highway)	1/1/2022		\$56.40	\$20.50	\$76.90
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	1/1/2021		\$36.50	\$20.10	\$56.60
Piledrivers	1/1/2022		\$37.60	\$20.50	\$58.10
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	5/1/2021		\$28.33	\$20.98	\$49.31
Plumber/Pipefitter	5/1/2021		\$38.77	\$28.46	\$67.23
Plumber/Pipefitter	5/1/2022		\$40.28	\$28.70	\$68.98
Roofers (Composition)	5/1/2021		\$40.33	\$33.12	\$73.45
Roofers (Composition)	5/1/2022		\$41.48	\$33.87	\$75.35
Roofers (Shingle)	5/1/2020		\$29.50	\$21.25	\$50.75
Roofers (Slate & Tile)	5/1/2020		\$32.50	\$21.25	\$53.75
Sheet Metal Workers	6/1/2021		\$36.08	\$42.65	\$78.73
Sheet Metal Workers	6/1/2022		\$40.22	\$41.01	\$81.23
Sign Makers and Hangars	7/17/2021		\$29.49	\$23.90	\$53.39
Sign Makers and Hangars	7/15/2022		\$30.54	\$24.35	\$54.89
Sprinklerfitters	4/1/2021		\$40.33	\$26.94	\$67.27
Sprinklerfitters	4/1/2022		\$42.29	\$27.48	\$69.77
Terrazzo Finisher	5/1/2021		\$33.23	\$19.03	\$52.26
Terrazzo Finisher	5/1/2022		\$34.46	\$19.24	\$53.70
Terrazzo Finisher	5/1/2023		\$35.79	\$19.25	\$55.04
Terrazzo Finisher	5/1/2024		\$37.16	\$19.26	\$56.42
Terrazzo Grinder	5/1/2021		\$33.94	\$19.03	\$52.97
Terrazzo Grinder	5/1/2022		\$35.19	\$19.24	\$54.43

Project: 23-01479 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Terrazzo Grinder	5/1/2023		\$36.54	\$19.25	\$55.79
Terrazzo Grinder	5/1/2024		\$37.92	\$19.26	\$57.18
Terrazzo Mechanics	5/1/2021		\$33.83	\$20.78	\$54.61
Terrazzo Mechanics	5/1/2022		\$35.12	\$20.99	\$56.11
Terrazzo Mechanics	5/1/2023		\$36.51	\$21.00	\$57.51
Terrazzo Mechanics	5/1/2024		\$37.94	\$21.01	\$58.95
Terrazzo Setter	5/1/2019		\$31.81	\$19.67	\$51.48
Tile & Marble Finisher	5/1/2021		\$29.61	\$15.14	\$44.75
Tile & Marble Finisher	5/1/2022		\$30.96	\$15.49	\$46.45
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	5/1/2021		\$31.55	\$17.34	\$48.89
Tile Setter	5/1/2022		\$32.85	\$17.74	\$50.59
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
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

Project: 23-01479 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter	5/1/2021		\$33.12	\$17.74	\$50.86
Carpenter	5/1/2022		\$34.02	\$18.39	\$52.41
Cement Finishers	6/1/2016		\$27.60	\$20.85	\$48.45
Electric Lineman	5/31/2021		\$49.22	\$27.36	\$76.58
Electric Lineman	5/30/2022		\$50.28	\$28.47	\$78.75
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
Laborers (Class 01 - See notes)	5/1/2021		\$23.21	\$18.09	\$41.30
Laborers (Class 01 - See notes)	5/1/2022		\$24.01	\$18.54	\$42.55
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)	5/1/2021		\$29.83	\$18.09	\$47.92
Laborers (Class 02 - See notes)	5/1/2022		\$30.63	\$18.54	\$49.17
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)	5/1/2021		\$26.82	\$18.09	\$44.91
Laborers (Class 03 - See notes)	5/1/2022		\$27.62	\$18.54	\$46.16
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)	5/1/2021		\$27.17	\$18.09	\$45.26
Laborers (Class 04 - See notes)	5/1/2022		\$27.97	\$18.54	\$46.51
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)	5/1/2021		\$27.84	\$18.09	\$45.93
Laborers (Class 05 - See notes)	5/1/2022		\$28.64	\$18.54	\$47.18
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)	5/1/2021		\$27.26	\$18.09	\$45.35
Laborers (Class 06 - See notes)	5/1/2022		\$28.06	\$18.54	\$46.60
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)	5/1/2021		\$27.55	\$18.09	\$45.64
Laborers (Class 07 - See notes)	5/1/2022		\$28.35	\$18.54	\$46.89
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)	5/1/2021		\$28.03	\$18.09	\$46.12
Laborers (Class 08 - See notes)	5/1/2022		\$28.83	\$18.54	\$47.37
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
Operators (Heavy, Class 01 - See Notes)	5/1/2021		\$38.44	\$27.52	\$65.96
Operators (Heavy, Class 01 - See Notes)	5/1/2022		\$39.98	\$27.98	\$67.96
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

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Project: 23-01479 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
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)	5/1/2021		\$40.69	\$28.18	\$68.87
Operators (Heavy, Class 01A - See Notes)	5/1/2022		\$42.23	\$28.64	\$70.87
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
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)	5/1/2021		\$38.16	\$27.43	\$65.59
Operators (Heavy, Class 02 - See Notes)	5/1/2022		\$39.70	\$27.89	\$67.59
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)	5/1/2021		\$40.41	\$28.10	\$68.51
Operators (Heavy, Class 02A - See Notes)	5/1/2022		\$41.95	\$28.56	\$70.51
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)	5/1/2021		\$35.24	\$26.57	\$61.81
Operators (Heavy, Class 03 - See Notes)	5/1/2022		\$36.78	\$27.03	\$63.81
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)	5/1/2021		\$34.10	\$26.24	\$60.34
Operators (Heavy, Class 04 - See Notes)	5/1/2022		\$35.65	\$26.69	\$62.34
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)	5/1/2021		\$33.65	\$26.11	\$59.76
Operators (Heavy, Class 05 - See Notes)	5/1/2022		\$35.20	\$26.56	\$61.76
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)	5/1/2021		\$32.77	\$25.84	\$58.61
Operators (Heavy, Class 06 - See Notes)	5/1/2022		\$34.31	\$26.31	\$60.62
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

Project: 23-01479 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Heavy, Class 07A - See Notes)	5/1/2021		\$46.59	\$31.37	\$77.96
Operators (Heavy, Class 07A - See Notes)	5/1/2022		\$48.45	\$31.91	\$80.36
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)	5/1/2021		\$46.25	\$31.26	\$77.51
Operators (Heavy, Class 07B - See Notes)	5/1/2022		\$48.10	\$31.81	\$79.91
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)	5/1/2021		\$39.10	\$25.70	\$64.80
Operators (Highway, Class 01 - See Notes)	5/1/2022		\$39.10	\$27.70	\$66.80
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)	5/1/2021		\$41.35	\$26.38	\$67.73
Operators (Highway, Class 01a - See Notes)	5/1/2022		\$41.35	\$28.38	\$69.73
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)	5/1/2021		\$37.93	\$25.35	\$63.28
Operators (Highway, Class 02 - See Notes)	5/1/2022		\$37.93	\$27.35	\$65.28
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
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)	5/1/2021		\$37.23	\$25.16	\$62.39
Operators (Highway, Class 03 - See Notes)	5/1/2022		\$37.23	\$27.15	\$64.38
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)	5/1/2021		\$36.77	\$25.03	\$61.80
Operators (Highway, Class 04 - See Notes)	5/1/2022		\$36.77	\$27.03	\$63.80
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)	5/1/2021		\$36.26	\$24.87	\$61.13
Operators (Highway, Class 05 - See Notes)	5/1/2022		\$36.26	\$26.88	\$63.14

Project: 23-01479 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
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)	5/1/2021		\$39.33	\$25.78	\$65.11
Operators (Highway, Class 06 - See Notes)	5/1/2022		\$39.33	\$27.77	\$67.10
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)	5/1/2021		\$41.58	\$26.43	\$68.01
Operators (Highway, Class 06/A - See Notes)	5/1/2022		\$41.58	\$28.43	\$70.01
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)	5/1/2021		\$47.08	\$29.49	\$76.57
Operators (Highway, Class 07/A - See Notes)	5/1/2022		\$47.38	\$31.59	\$78.97
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)	5/1/2021		\$45.66	\$29.08	\$74.74
Operators (Highway, Class 07/B - See Notes)	5/1/2022		\$45.97	\$31.17	\$77.14
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)	5/1/2021		\$27.97	\$16.50	\$44.47
Painters Class 2 (see notes)	5/1/2022		\$28.55	\$17.03	\$45.58
Painters Class 3 (see notes)	5/1/2021		\$33.72	\$16.50	\$50.22
Painters Class 3 (see notes)	5/1/2022		\$34.30	\$17.03	\$51.33
Pile Driver Divers (Building, Heavy, Highway)	1/1/2021		\$54.75	\$20.10	\$74.85
Pile Driver Divers (Building, Heavy, Highway)	1/1/2022		\$56.40	\$20.50	\$76.90
Piledrivers	5/1/2021		\$33.12	\$17.74	\$50.86
Piledrivers	5/1/2022		\$34.02	\$18.39	\$52.41
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