

**Portland  
Water  
District**

*From Sebago Lake to Casco Bay*

## **PROVIDENCE WATER MAIN REPLACEMENT**

**ADDENDUM NO. 1  
TO  
CONTRACT DOCUMENTS  
FOR**

**BIDDING AND CONTRACT REQUIREMENTS AND SPECIFICATIONS  
VOLUME 1 OF 1**

**DATE: JANUARY 29, 2025**

Prepared By:  
**PORTLAND WATER DISTRICT  
225 Douglass Street  
Portland, ME 04104**

This Addendum shall be considered part of the bid documents for the Providence Street Water Main Replacement project. Bidders must acknowledge receipt of this Addendum within Division 0: Procurement and Contracting Requirements Section 00410.

Except as described below, the original bid document remains unchanged.

There is no change to the bid due date of 2/6/2025 by 3:00PM local time.

**Amend the Scope of Work as Follows:**

**SPECIFICATION UPDATES**

1. **Section 00410A– Bid Form.** W17 and W18 have been removed from the bid form. It is no longer required that the trench be milled and paved with surface HMA in spring 2026. W16 quantity has been updated as well.
2. **Section 01250 – Measurement and Payment.** W17 and W18 have been removed from this section. It is no longer required that the trench be milled and paved with surface HMA in spring 2026. Items W1-W3 have been revised to clarify responsibility of contractor related to pipe pick up at owner’s pit located at Soccer Drive, Windham, Maine.

**DRAWINGS**

1. **Sheet D2.** It is no longer required that the water main and large service pipe, or any service pipe trenches be milled and paved with surface HMA in spring 2026. The surface pavement sections of Table 1 have been removed, and the base pavement values have been updated.

**ATTACHMENTS**

1. Project Question Log
2. Section 00410A-A1 – Bid Form - Revised
3. Section 01250-A1 – Measurement and Payment - Revised
4. Sheet D2-REV1 - Revised

# Portland Water District

Providence – Water Main Replacement Project

Bidding – Question & Response Log

Last Revised: January 29, 2025

- 1. Are inverts for manholes in the areas of the project available?**
  - a. *PWD does not have information related to inverts for the manholes in this project area.*
- 2. Does the replacement pipe follow the existing main?**
  - a. *Yes, the replacement pipe will be installed in the same location and elevation as the existing pipe.*
- 3. Are Davis Bacon wage rates required for this project?**
  - a. *Davis Bacon wage rates are not required for this project.*
- 4. Can services be pulled?**
  - a. *Yes, services can be pulled.*
- 5. Are there any requirements related to the Green New Deal involved in this project?**
  - a. *The project does not carry any City of Portland Green New Deal requirements. However, the project will require the contractor to comply with all City of Portland ordinances/permit requirements, including their dewatering program requirements.*
- 6. Will work in Presumpscot Street be required to be completed at night?**
  - a. *This requirement will ultimately be up to the City of Portland during the review of the traffic control plan. PWD does not anticipate night work being required as part of this project.*
- 7. Will road closure support be provided for this project?**
  - a. *This will ultimately be up to the City of Portland's during the review of the traffic control plan.*
- 8. Who is the pipe manufacturer?**
  - a. *The project will utilize US Pipe supplied by Core and Main. The contractor is responsible for coordinating delivery of the pipe to the project site.*
- 9. Does PWD have an official start date or can work begin as soon as the weather permits?**
  - a. *PWD does not have an official start date. The work can begin any time after the construction season begins on April 15, 2025.*
- 10. Please clarify if asphalt escalation is allowed for this project. The Measurement and Payment Section references MDOT Spec 108 which has a 500-ton minimum.**
  - a. *PWD does not require the 500-ton minimum in order to utilize pavement escalation. PWD is following the MDOT spec 108, except for the quantity minimum.*
- 11. Please clarify how the pavement quantities were arrived at.**

- a. PWD used the equation outlined in the Measurement & Payment Section (see below). This calculation now includes estimates for short and long side service trenches.

$$\begin{array}{ccccccc} \text{Paving Area} & \times & \text{Paving Thickness} & \times & 0.06 & = & \text{Paving Weight} \\ \text{(square yards)} & & \text{(inches)} & & & & \text{(tons)} \end{array}$$

BID FORM  
ADDENDUM 1  
PROVIDENCE WATER MAIN RENEWAL  
PWD 2025

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Bid Unit Price</u>	<u>Bid Price</u>
W1	12-inch DI Water Main Installed	LF	1830	\$	\$
W2	8-inch DI Water Main Installed	LF	40	\$	\$
W3	6-inch DI Water Main Installed	LF	20	\$	\$
W4	12-inch Gate Valve	EA	4	\$	\$
W5	8-inch Gate Valve	EA	2	\$	\$
W6	Hydrant Assembly w/ 6" Gate Valve	EA	2	\$	\$
W7	1-inch Air Release Valve	EA	3	\$	\$
W8	1-inch Copper Service - Short side	EA	17	\$	\$
W9	1-inch Copper Service - Long side	EA	21	\$	\$
W10	1-inch Copper Service - Reconnect	EA	3	\$	\$
W11	Gravel Borrow	CY	25	\$	\$
W12	Unsuitable Material Excavated Below Pipe Grade	CY	25	\$	\$
W13	Rock Excavation	CY	25	\$	\$
W14	Aggregate Subbase Course Type D	CY	750	\$	\$
W15	Aggregate Base Course Type A	CY	175	\$	\$
W16	HMA Binder Course - 12.5MM	T	500	\$	\$
W17	Traffic Control	LS	1	\$	\$
W18	Police Detail	HR	12	\$	\$
W19	Flagging	LS	1	\$	\$
W20	Temporary Water System	LS	1	\$	\$
W21	Foreman	HR	8	\$	\$
W22	Laborer	HR	8	\$	\$
W23	Excavator & Operator	HR	8	\$	\$
W24	Loader & Operator	HR	8	\$	\$
W25	Dump Truck & Driver	HR	8	\$	\$

TOTAL OF ALL BID PRICES:        \$ \_\_\_\_\_

Section 01250-A1

Measurement and Payment

PART 1 - GENERAL

1.01 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

- A. All measurements for payments will be based on completed work performed in strict accordance with the drawings and specifications, and on the contract bidding and payment item schedules. All work completed under the contract will be measured by the Owner according to the methods outlined below. In cases where the payment clause in the specifications relating to any unit or lump sum price stated in the contract requires that the said unit or lump sum price cover and be considered compensation for certain work or material essential to the item, this same item will not be measured or paid for under any other pay item which may appear elsewhere in the specifications.
- B. The Contractor, in case of unit price items measured for payment, shall be paid for the actual amount of work accepted and for the actual amount of materials in place. At the end of each day's work, the Contractor's authorized representative shall meet with the Owner's representative and determine the quantities of unit price work accomplished or completed during the work day. The Owner's representative will then prepare two "Daily Quantity Reports" which shall be signed by both the Contractor's representative and the District's representative. These completed forms will provide the basis for the Contractor's partial payment requests. Items not appearing on the Daily Quantity Report will not be included for payment.

1.02 INCIDENTAL WORK

- A. Incidental work items for which separate payment is not made include (but are not limited to) the following items:
  - 1. Dewatering
  - 2. Dust Control
  - 3. Erosion control
  - 4. Traffic control plan
  - 5. Construction signs
  - 6. Trench boxes, steel and/or wood sheeting as required, including that left in place
  - 7. Clean-up
  - 8. Loaming and seeding
  - 9. Restoration of property
  - 10. Repair and replacement of utilities damaged by construction activity and corresponding proper disposal of removed materials
  - 11. Crossing other utilities
  - 12. Bonds, insurance, shop drawings, warranties and other submittals required by the contract documents
  - 13. Temporary construction and other facilities not to be permanently incorporated into the work necessary for construction sequencing and maintenance of operations.
  - 14. Permits not otherwise paid for or provided by the Owner
  - 15. Facilities for storage of materials to be incorporated into the Work
  - 16. Test pits to determine existing utility locations, soil conditions, and as required to complete the Work

17. Excavation under/near and/or crossing other utilities, including any equipment/supports required for that work
18. Assessment of potential obstructions to project work (e.g., existing pipes, services, conduits, ducts, sewers, etc.) and all arrangements with owners of those obstructions to allow for the project work to take place.
19. Protection of existing trees, buildings, structures, and utilities (both public and private) including poles, signs, services to buildings, buried utilities, gas pipes, water pipes, hydrants, sewers, drains, and electric and telephone cables, whether or not they are shown on the Drawings. The Contractor shall carefully support and protect all such structures and utilities from injury of any kind.
20. Mobilization/demobilization.
21. Clearing, grubbing, and stripping.
22. Saw cutting, removal, and disposal of existing pavement.
23. Resetting or replacement of existing street signs
24. Pre-construction photographs/videos (as necessary).

### 1.03 PAYMENT ITEMS

#### A. Items W1 to W3 - Ductile Iron Water Main – Pipe Supplied by Owner

1. Method of Measurement: Linear feet as measured along the centerline of the pipe for the actual number of linear feet of pipe and fittings installed.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for clearing, excavating, shoring and bracing, dewatering, coordinating with owner to pick up and haul pipe from owner's pit to job site, standard gaskets, polyethylene encasement, fittings, laying and jointing, connections to existing piping, removal and disposal of existing piping and appurtenances, capping existing pipes that are not removed, thrust restraint, select backfill, backfilling, testing, restoration and associated work as specified and shown on the Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts.
3. Schedule of Payment: Installation – 80%, Testing – 20%,

#### B. Items W4 to W5 - Gate Valves

1. Method of Measurement: Each.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, valve, valve box, abandoning/removing existing valves, select backfill, backfilling, testing and associated work as specified and shown on Drawings.
3. Schedule of Payment: Installation – 100%

#### C. Item W6 - Hydrant Assembly

1. Method of Measurement: Each.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, 6-inch hydrant control valve, valve box, 6-

inch ductile iron pipe, hydrant, fittings, hydrant extensions (if required), restrained joint gaskets (if necessary), removal and disposal of existing hydrant and appurtenances, thrust blocks, polyethylene wrap, select backfill, backfilling, testing, cleanup (loam/seed and/or sidewalk restoration), and associated work as specified and shown on Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts.

3. Schedule of Payment: Installation – 100%

D. Item W7 - Air Release Valves

1. Method of Measurement: Each.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, valve, fittings, valve box, select backfill, backfilling, testing, cleanup, and associated work as specified and shown on Drawings.
3. Schedule of Payment: Installation – 100%

E. Items W8 to W9 - Copper Services

1. Method of Measurement: Each.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, pipe, corporation, fittings, connection to existing service, service box, rod, curb stop, select backfill, backfilling, testing, cleanup (loam/seed and/or sidewalk/curb restoration), and associated work as specified and shown on Drawings. Separate payment shall be made for aggregate subbase gravel, aggregate base gravel, and Hot Mix Asphalts.
3. Schedule of Payment: Installation – 100%

F. Item W10 – Reconnect Services

1. Method of Measurement: Each.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, pipe, corporation, fittings, connection to existing service, select backfill, backfilling, testing, and associated work as specified and shown on Drawings.
3. Schedule of Payment: Installation – 100%

G. Item W11 - Gravel Borrow

1. Method of Measurement: Cubic yards as measured in place for the actual number of yards of gravel borrow installed.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, installation and compaction of gravel borrow as directed by the Owner to replace unsuitable excavated material.



3. Schedule of Payment: Installation - 100%

H. Item W12 - Unsuitable Material Excavated Below Pipe Grade

1. Method of Measurement: Cubic yard as measured in place prior to removal for the actual number of cubic yards excavated within the limits shown on the Drawings and directed by the Owner.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for removing unsuitable material excavated below trench grade and replacing with select backfill as directed by the Owner.
3. Schedule of Payment: Excavation - 100%

I. Item W13 - Rock Excavation

1. Method of Measurement: Cubic yard as measured in place prior to removal for the actual number of cubic yards excavated within the pay limits shown on the Drawings and directed by the Owner. Boulders less than two cubic yards in volume will not be measured for payment.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for excavation, shoring and bracing, dewatering, excavation, select backfill replacement, erosion control, cleanup and associated work as specified and shown on the Drawings.
3. Schedule of Payment: Excavation - 100%

J. Item W14 - Aggregate Subbase Course Type D

1. Method of Measurement: Cubic yards as measured in place for the actual number of yards of Aggregate Subbase Course Type D installed.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for installation grading, and compaction of Aggregate Subbase Course Crushed (MDOT 703.06c) used for trench repair within the pay limits within the trench repair areas indicated on the drawings.
3. Schedule of Payment: Installation - 100%

K. Item W15 - Aggregate Base Course Type A

1. Method of Measurement: Cubic yards as measured in place for the actual number of yards of Aggregate Base Course Type A installed.
2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for installation grading, and compaction of Aggregate Base Course Crushed (MDOT 703.06a) used for trench repair within the pay limits within the trench repair areas indicated on the drawings.
3. Schedule of Payment: Installation - 100%

L. Items W16 - Hot Mix Asphalt (HMA) [12.5MM]

1. Method of Measurement: The volume will be measured in place for the actual quantity of paving installed within the pay limits within the trench repair areas indicated on the drawings. The total paving volume will be converted to weight in tons by the following formula for payment under these bid items:

$$\begin{array}{ccccccc} \text{Paving Area} & \times & \text{Paving Thickness} & \times & 0.06 & = & \text{Paving Weight} \\ \text{(square yards)} & & \text{(inches)} & & & & \text{(tons)} \end{array}$$

2. Basis of Payment: Payment of the unit price established in the Bid shall be full compensation for placing hot bituminous pavement, milling, clean up and associated work as specified and shown on the Drawings. A price adjustment (up or down) based on the variance in costs for performance graded binder will be made for this item and calculated with the following formula (based on MDOT special provision section 108.)

Price adjustment = (# of tons) x (period price - base price) x [asphalt factor]

Base Price = The price of the PG binder liquid per ton that exists on the bid opening date

Period Price = The price of the PG binder liquid per ton that exists on the paving date that uses the New England Average Selling price.

% Asphalt factor = 5.2% for 19mm, 5.6% for 12.5mm and 6.2% for 9.5mm

Liquid prices are found at:

<http://www.maine.gov/mdot/contractors/bidderinfo/asphalt.shtml>

3. Schedule of Payment: Installation - 100%

M. Items W17 - Traffic Control

1. Method of Measurement: Lump Sum.
2. Basis of Payment: Payment of the lump sum prices established in the Bid shall be full compensation for providing work zone traffic control, traffic signs, construction signs, flaggers, and associated work as specified.
3. Schedule of Payment: Final Completion - 100%

N. Item W18 - Police Detail

1. Method of Measurement: Total hours.
2. Basis of Payment: Unit price per man-hour as stated in the Bid. Payment shall include the number of hours the designated station is occupied. The number of hours authorized for payment will be measured to the nearest ¼ hour
3. Schedule of Payment: Completion of Work - 100%

O. Items W19 - Flagging

1. Method of Measurement: Lump Sum.
2. Basis of Payment: Payment of the lump sum prices established in the Bid shall be full compensation for providing work zone flagging and associated work as specified.
3. Schedule of Payment: Final Completion - 100%

P. Items W20 - Temporary Water Systems

1. Method of Measurement: Lump Sum.
2. Basis of Payment: Payment of the lump sum prices established in the Bid shall be full compensation for installation of, testing of, service connections to [including customer coordination], maintenance of, removal of, and restoration of the temporary water system including pavement restoration outside the specified limits of the water piping trench, and associated work as specified.
3. Schedule of Payment: Installation, Testing, & Service Connections Complete – 50%, Substantial Completion - 50%

Q. Items W21 & W22 - Foreman & Laborer

1. Method of Measurement: Total hours.
2. Basis of Payment: Unit price per man-hour as stated in the Bid. Payment shall include wages, benefits and overhead and profit for personnel for the purpose of performing extra work at the request of the Owner.
3. Schedule of Payment: Completion of Work - 100%

R. Items W23 to W24 - Excavator, Loader, and Dump Truck

1. Method of Measurement: Total hours.
2. Basis of Payment: Unit price per hour as stated in the Bid. Payment shall include equipment and operator/driver, wages, benefits, fuel and overhead and profit for the purpose of performing extra work at the request of the Owner.
3. Schedule of Payment: Completion of Work - 100%

PART 2 – PRODUCTS

(NOT USED)

PART 3 - EXECUTION

(NOT USED)

-- END OF SECTION --

**PROVIDENCE STREET  
WATER MAIN REPLACEMENT  
PORTLAND, MAINE  
STANDARD WATER DETAILS**

DATE: 1/15/2025  
REV 1 DATE: 1/24/2025  
REV 2 DATE:

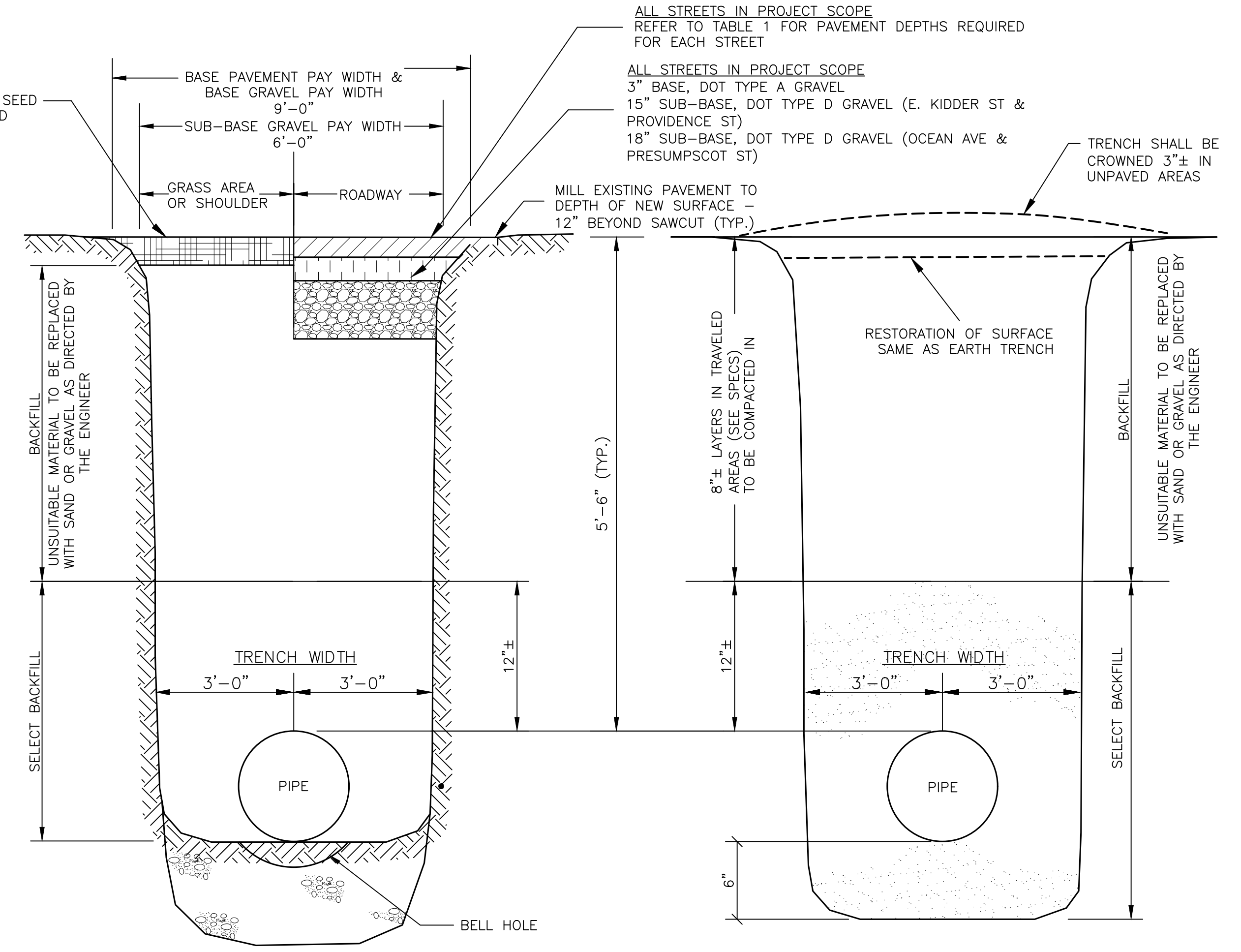
DESIGN BY: KSJ  
DRAWN BY: BSJ

225 Douglass Street  
PO Box 3553  
Portland, Maine 04104

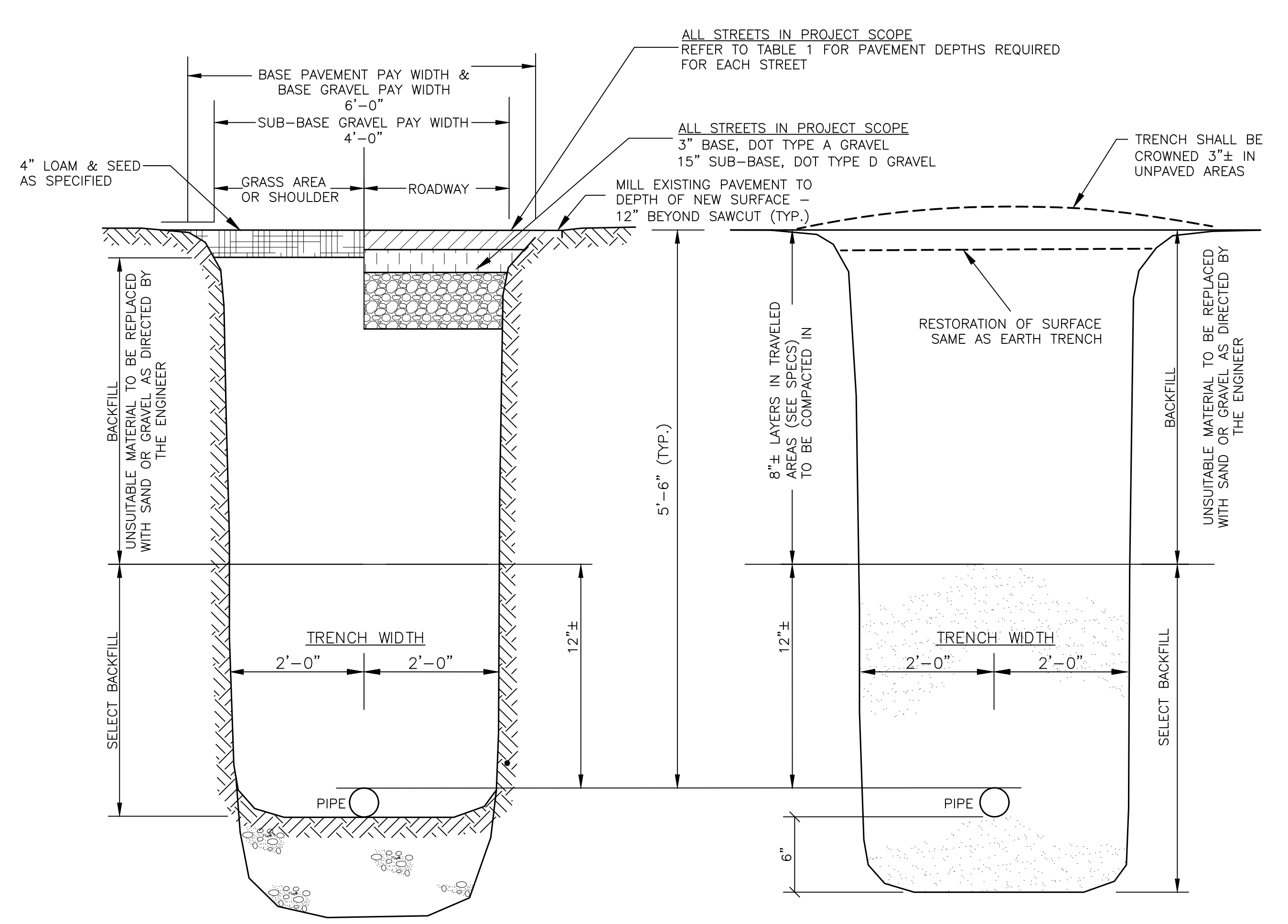


TABLE 1	
ROAD	PAVEMENT BASE 12.5MM
PROVIDENCE ST	4.5'
E KIDDER ST	4.5'
OCEAN AVE	5"
PRESUMPCOT ST	5"

- TRENCH SECTION NOTES**
- ALL ROADWAY PAVEMENT SHALL BE SAWCUT AND PLACED WITH A STREET PAVER.
  - TACK COAT APPLIED TO ALL SAWCUT AND MILLED SURFACES.
  - THE FINAL SAW CUTTING OF PAVEMENT SHALL BE PERFORMED AFTER BACKFILLING AND COMPACTION TO THE TOP OF THE EXISTING GRAVEL BASE IS COMPLETE.
  - BASE PAVEMENT INSTALLED MUST MATCH EXISTING BASE PAVEMENT DEPTH WITH A MAX PAVEMENT DEPTH OF 6". DEPTHS LISTED IN DETAIL ARE APPROXIMATE BASED ON CITY RECORDS OF PAVEMENT DEPTH.



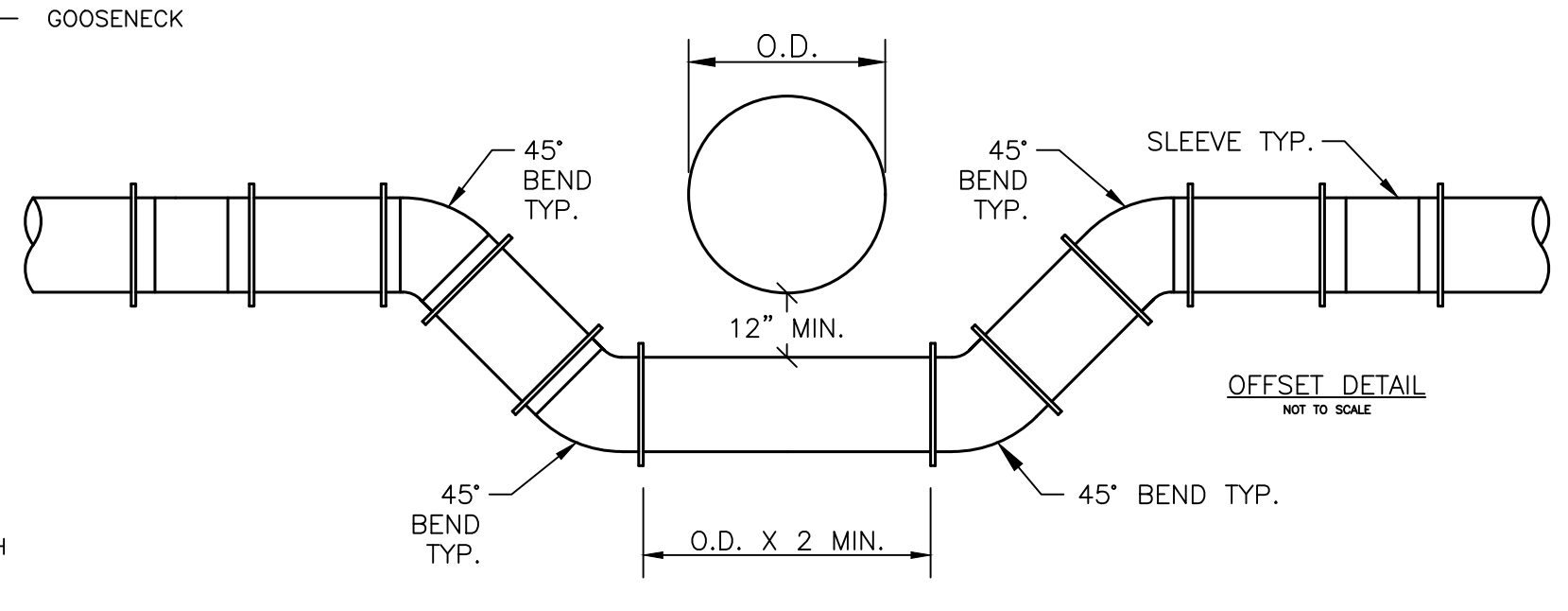
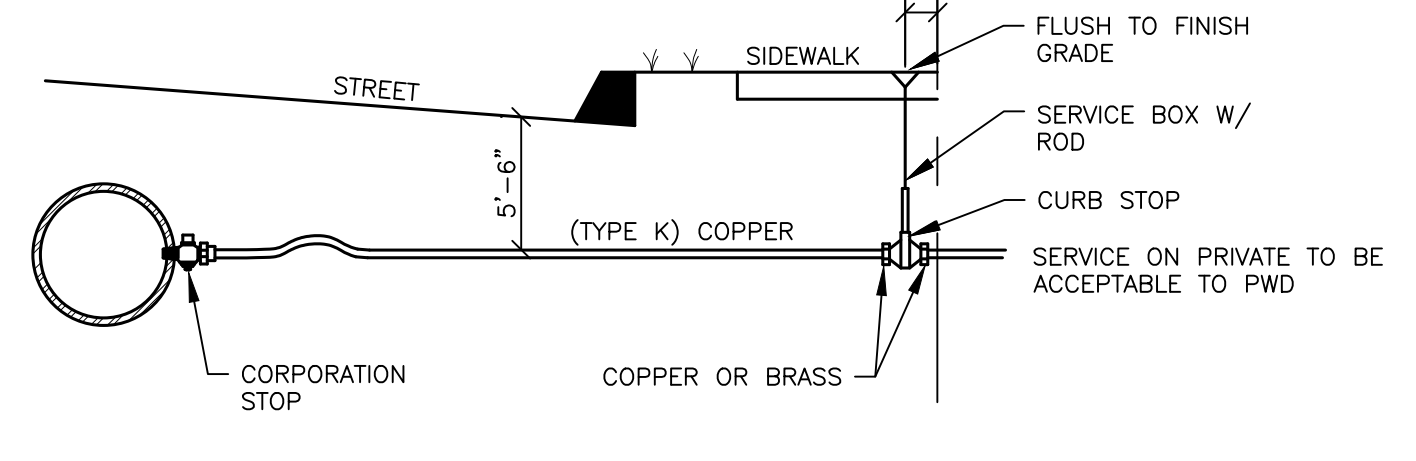
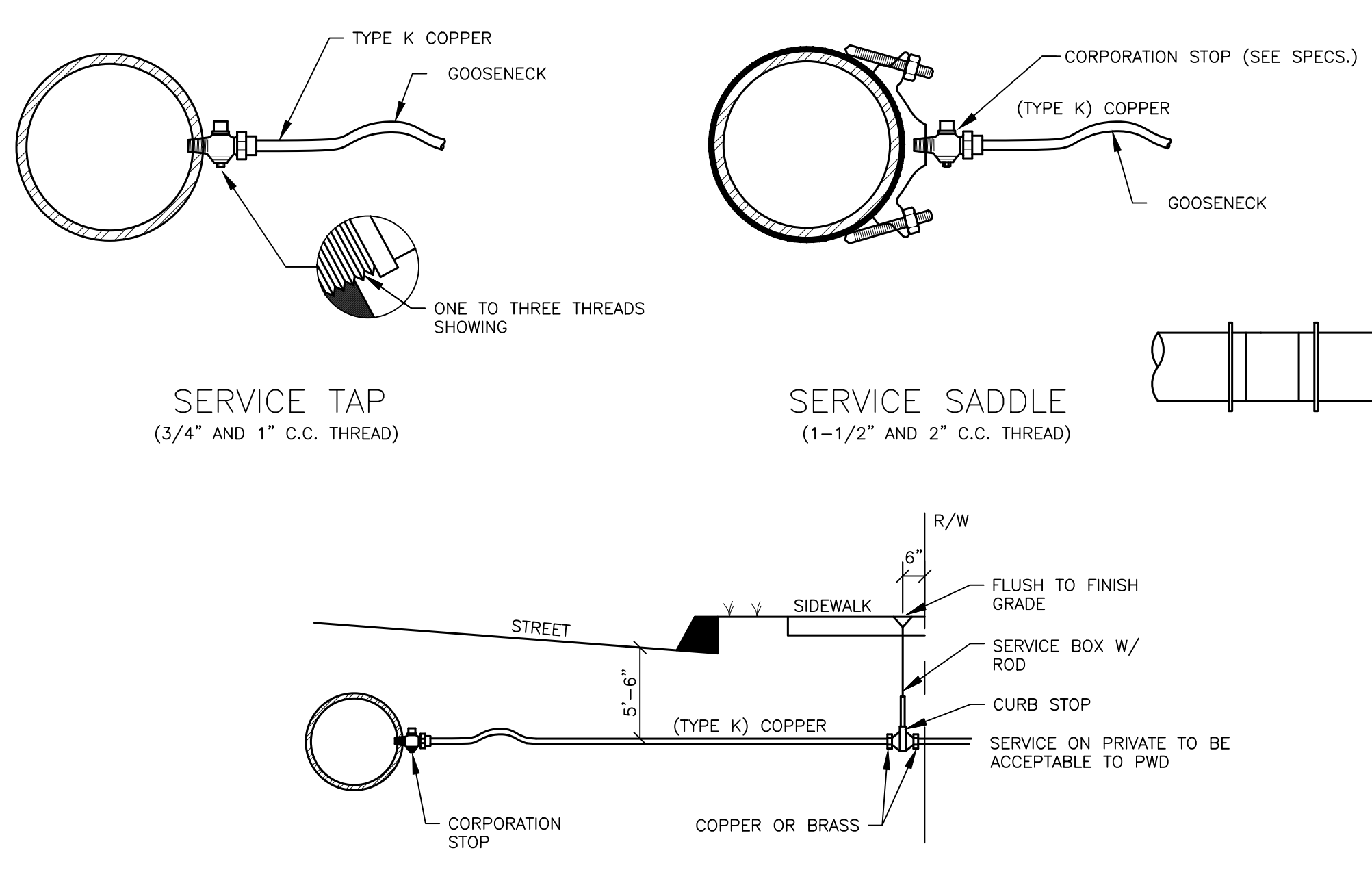
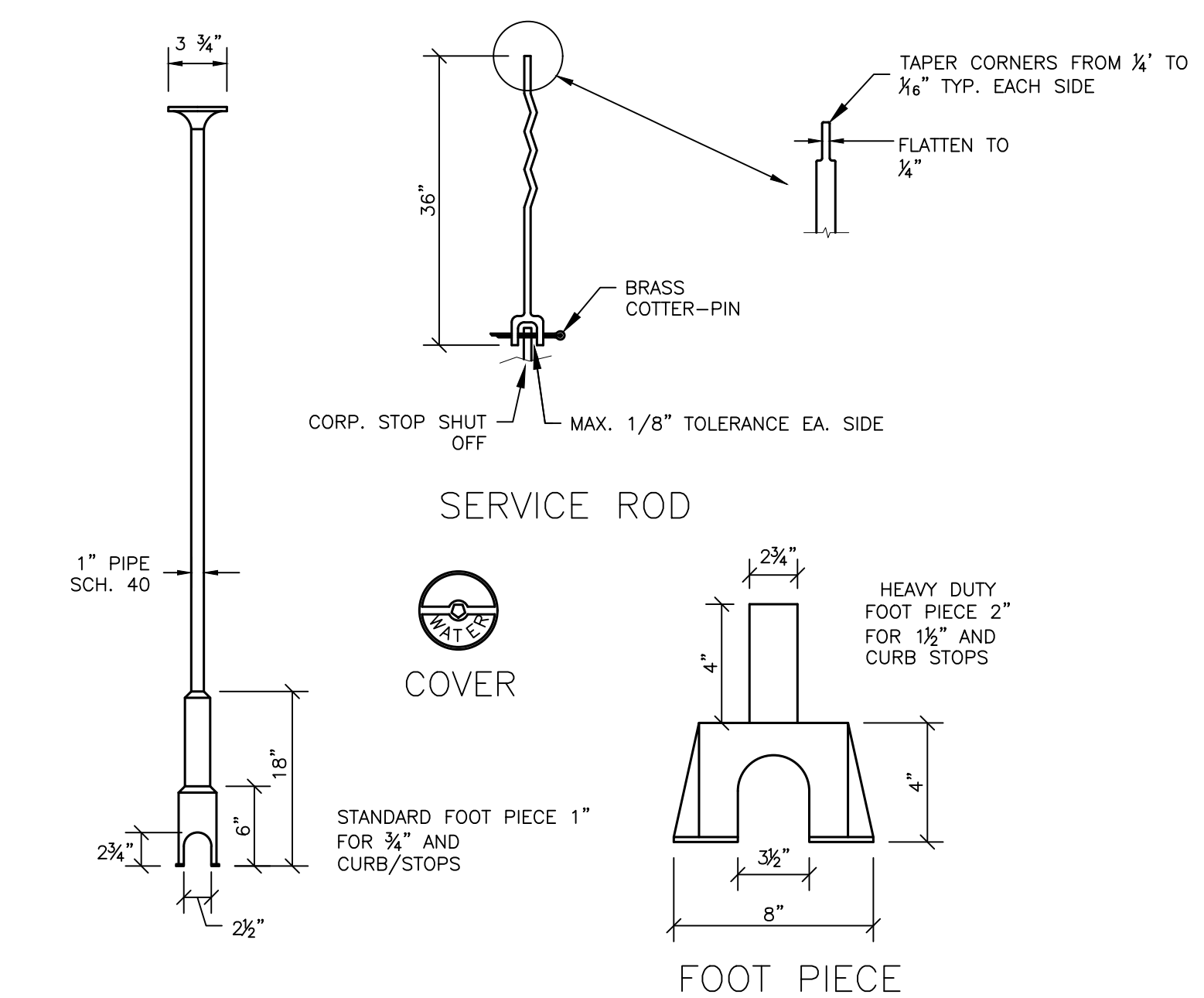
**SECTION THRU EARTH TRENCH  
WATER MAIN & LARGE SERVICE PIPE (≥4")  
NOT TO SCALE**



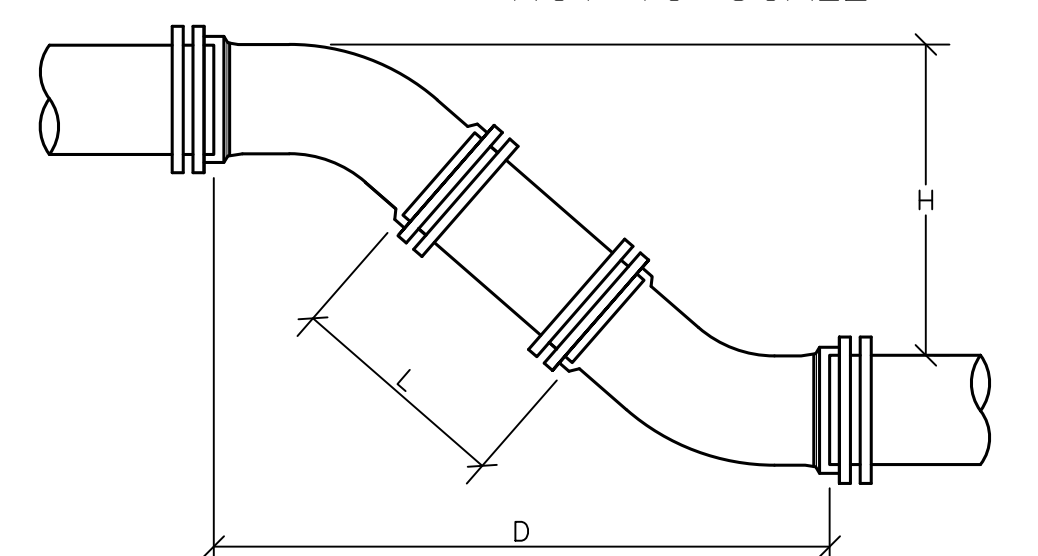
**SECTION THRU LEDGE TRENCH  
WATER MAIN & LARGE SERVICE PIPE (≥4")  
NOT TO SCALE**

**SECTION THRU EARTH TRENCH  
SERVICE PIPE (1"-2")  
NOT TO SCALE**

**SECTION THRU LEDGE TRENCH  
SERVICE PIPE (1"-2")  
NOT TO SCALE**



NOTE: DIMENSIONS APPLICABLE FOR SIGMA COMPACT BENDS. FOR TYLER COMPACT BENDS, ADD 1/2" TO "D" DIMENSION AND SUBTRACT 1/2" FROM "L" DIMENSION. FOR OTHER FITTINGS REFER TO MANUFACTURER'S RECOMMENDATIONS.



H	6" PIPE		8" PIPE		12" PIPE	
	D	L	D	L	D	L
12"	1' 6-1/2"	0' 10-1/2"	1' 7-1/2"	0' 9-1/2"	1' 11-1/2"	0' 5-1/2"
13"	1' 7-1/2"	0' 11-7/8"	1' 8-1/2"	0' 10-7/8"	2' 0-1/2"	0' 6-7/8"
14"	1' 8-1/2"	1' 1-5/16"	1' 9-1/2"	1' 0-5/16"	2' 1-1/2"	0' 8-5/16"
15"	1' 9-1/2"	1' 2-11/16"	1' 10-1/2"	1' 1-11/16"	2' 2-1/2"	0' 9-11/16"
16"	1' 10-1/2"	1' 4-1/8"	1' 11-1/2"	1' 3-1/8"	2' 3-1/2"	0' 11-1/8"
17"	1' 11-1/2"	1' 5-9/16"	2' 0-1/2"	1' 4-9/16"	2' 4-1/2"	0' 10-9/16"
18"	2' 0-1/2"	1' 6-15/16"	2' 1-1/2"	1' 5-15/16"	2' 5-1/2"	1' 1-15/16"
19"	2' 1-1/2"	1' 8-3/8"	2' 2-1/2"	1' 7-3/8"	2' 6-1/2"	1' 3-3/8"
20"	2' 2-1/2"	1' 9-13/16"	2' 3-1/2"	1' 8-13/16"	2' 7-1/2"	1' 4-13/16"
21"	2' 3-1/2"	1' 11-3/16"	2' 4-1/2"	1' 10-3/16"	2' 8-1/2"	1' 6-3/16"
22"	2' 4-1/2"	2' 0-5/8"	2' 5-1/2"	1' 11-5/8"	2' 9-1/2"	1' 7-5/8"
23"	2' 5-1/2"	2' 2"	2' 6-1/2"	2' 2"	2' 10-1/2"	1' 9"
24"	2' 6-1/2"	2' 3-7/16"	2' 7-1/2"	2' 3-7/16"	2' 11-1/2"	1' 10-7/16"
25"	2' 7-1/2"	2' 4-7/8"	2' 8-1/2"	2' 3-7/8"	3' 0-1/2"	1' 11-7/8"
26"	2' 8-1/2"	2' 6-1/4"	2' 9-1/2"	2' 5-1/4"	3' 1-1/2"	2' 1-1/4"
27"	2' 9-1/2"	2' 7-11/16"	2' 10-1/2"	2' 6-11/16"	3' 2-1/2"	2' 2-11/16"
28"	2' 10-1/2"	2' 9-1/8"	2' 11-1/2"	2' 8-1/8"	3' 3-1/2"	2' 4-1/8"
29"	2' 11-1/2"	2' 10-1/2"	3' 0-1/2"	2' 9-1/2"	3' 4-1/2"	2' 5-1/2"
30"	3' 0-1/2"	2' 11-15/16"	3' 1-1/2"	2' 10-15/16"	3' 5-1/2"	2' 6-15/16"
31"	3' 1-1/2"	3' 1-5/16"	3' 2-1/2"	3' 0-5/16"	3' 6-1/2"	2' 8-5/16"
32"	3' 2-1/2"	3' 2-3/4"	3' 3-1/2"	3' 1-3/4"	3' 7-1/2"	2' 9-3/4"
33"	3' 3-1/2"	3' 4-3/16"	3' 4-1/2"	3' 3-3/16"	3' 8-1/2"	2' 11-3/16"
34"	3' 4-1/2"	3' 5-9/16"	3' 5-1/2"	3' 4-9/16"	3' 9-1/2"	3' 0-9/16"
35"	3' 5-1/2"	3' 7"	3' 6-1/2"	3' 6"	3' 10-1/2"	3' 2"
36"	3' 6-1/2"	3' 8-7/16"	3' 7-1/2"	3' 7-7/16"	3' 11-1/2"	3' 3-7/16"
37"	3' 7-1/2"	3' 9-13/16"	3' 8-1/2"	3' 8-13/16"	4' 0-1/2"	3' 4-13/16"
38"	3' 8-1/2"	3' 11-1/4"	3' 9-1/2"	3' 10-1/4"	4' 1-1/2"	3' 6-1/4"
39"	3' 9-1/2"	4' 0-11/16"	3' 10-1/2"	3' 11-11/16"	4' 2-1/2"	3' 7-11/16"
40"	3' 10-1/2"	4' 2-1/16"	3' 11-1/2"	4' 1-1/16"	4' 3-1/2"	3' 9-1/16"
41"	3' 11-1/2"	4' 3-1/2"	4' 0-1/2"	4' 2-1/2"	4' 4-1/2"	3' 10-1/2"
42"	4' 0-1/2"	4' 4-7/8"	4' 1-1/2"	4' 3-7/8"	4' 5-1/2"	3' 11-7/8"
43"	4' 1-1/2"	4' 6-5/16"	4' 2-1/2"	4' 5-5/16"	4' 6-1/2"	4' 1-5/16"
44"	4' 2-1/2"	4' 7-3/4"	4' 3-1/2"	4' 6-3/4"	4' 7-1/2"	4' 2-3/4"
45"	4' 3-1/2"	4' 9-1/8"	4' 4-1/2"	4' 8-1/8"	4' 8-1/2"	4' 4-1/8"
46"	4' 4-1/2"	4' 10-9/16"	4' 5-1/2"	4' 9-9/16"	4' 9-1/2"	4' 5-9/16"
47"	4' 5-1/2"	4' 11-15/16"	4' 6-1/2"	4' 10-15/16"	4' 10-1/2"	4' 6-15/16"
48"	4' 6-1/2"	5' 1-3/8"	4' 7-1/2"	5' 0-3/8"	4' 11-1/2"	4' 8-3/8"
49"	4' 7-1/2"	5' 2-13/16"	4' 8-1/2"	5' 1-13/16"	5' 0-1/2"	4' 9-13/16"
50"	4' 8-1/2"	5' 4-3/16"	4' 9-1/2"	5' 3-3/16"	5' 1-1/2"	4' 11-3/16"
51"	4' 9-1/2"	5' 5-5/8"	4' 10-1/2"	5' 4-5/8"	5' 2-1/2"	5' 0-5/8"
52"	4' 10-1/2"	5' 7-1/16"	4' 11-1/2"	5' 6-1/16"	5' 3-1/2"	5' 2-1/16"
53"	4' 11-1/2"	5' 8-7/16"	5' 0-1/2"	5' 7-7/16"	5' 4-1/2"	5' 3-7/16"
54"	5' 0-1/2"	5' 9-7/8"	5' 1-1/2"	5' 8-7/8"	5' 5-1/2"	5' 4-7/8"
55"	5' 1-1/2"	5' 11-3/16"	5' 2-1/2"	5' 10-3/16"	5' 6-1/2"	5' 6-5/16"

TYPICAL MAIN OFFSET