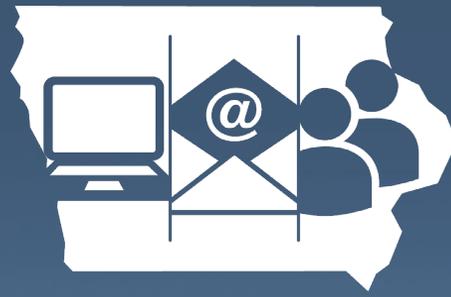




# SUDAS

Statewide Urban Design & Specifications



# PWSB

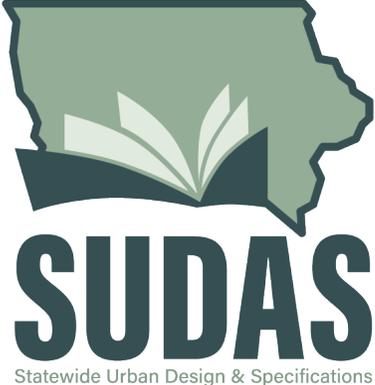
Public Works Service Bureau

## SUDAS and PWSB Updates

David Carney and Beth Richards



# After 20+ years, we have a new logo!



# Design Manual Items Approved for 2026

## Determining Structure Diameter (Sections 2C-3, G and 3C-1, L, 10)

- c. Determine the diameter of the manhole required to provide the minimum concrete leg dimension. This diameter may be calculated with the following equation:

$$MH_d = \frac{BO_1 + BO_2 + 2CL}{\theta \times \left(\frac{\pi}{180}\right)}$$

Equation 3C-1.01

Where:

$MH_d$  = Manhole Diameter, inches

$BO$  = Blockout Diameter, inches

$CL$  = Minimum Concrete Leg Length, inches (6 inches)

$\theta$  = Angle between pipe centerlines, degrees

- d. Round the minimum manhole diameter calculated, up to the next standard manhole size (48 inches, 60 inches, 72 inches, 84 inches, 96 inches, 108 inches, or 120 inches).
- e. Verify that the manhole diameter calculated is sufficient for the largest pipe diameter (see Table 3C-1.03).

# Design Manual Items Approved for 2026

First Example:

36" RCP Gasketed Pipe BO=52"

Straight through run  $\theta^\circ = 180^\circ$

$$MH_d = \frac{BO_1 + BO_2 + 2CL}{\theta^\circ \times (\pi/180)}$$

$$MH_d = \frac{52'' + 52'' + 2(12'')}{180^\circ \times (\pi/180)}$$

$$MH_d = \frac{128''}{3.14159} = 40.74 \sim 48''$$

**A pipe requiring a 52" BO won't fit in a 48" Manhole**



# Design Manual Items Approved for 2026

Second Example:

12" PVC Pipe  $BO_1 = 12"$

30" PVC Pipe  $BO_2 = 35"$

Intersection  $\theta^\circ = 90^\circ$

$$MH_d = \frac{BO_1 + BO_2 + 2CL}{\theta^\circ \times (\pi/180)}$$

$$MH_d = \frac{35" + 12" + 2(12")}{90^\circ \times (\pi/180)}$$

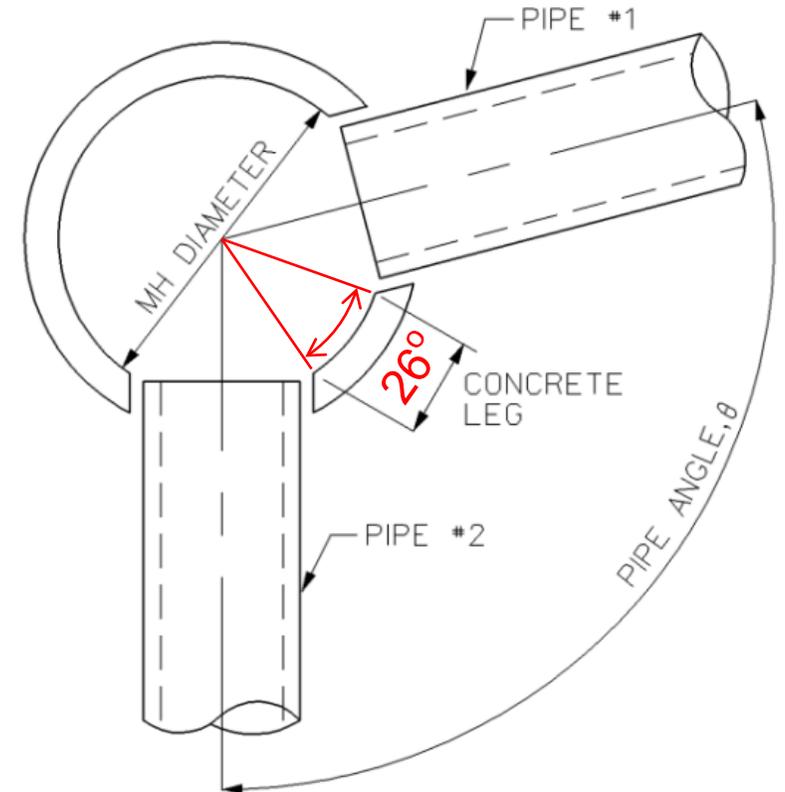
$$MH_d = \frac{71"}{1.57} = 45.2" \sim 48"$$

# Design Manual Items Approved for 2026

$$\text{Arc Length (CL)} = (\Delta/360)\pi d$$

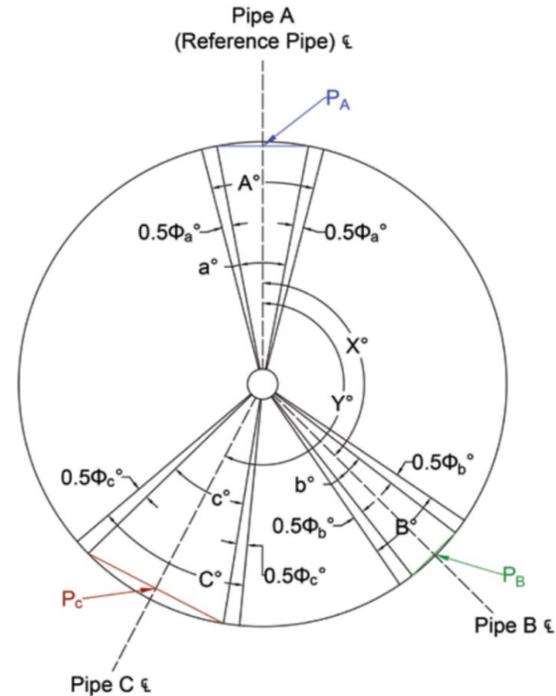
$$\text{Arc Length (CL)} = (26^\circ/360)\pi 48''$$

$$\text{Arc Length (CL)} = 10.89'' \neq 12'' \text{ minimum}$$



# Design Manual Items Approved for 2026

Figure 2C-3.06: Three Pipe Configuration



Variables:

$r$	=	manhole internal radius (in inches)
$S$	=	minimum structural leg (in inches) (recommended 12 inches)
$P_A, P_B, P_C, P_D$	=	penetration in manhole to accommodate specified pipe (inches)

Pipe Penetration Equation:

$P_A, P_B, P_C, P_D = \text{pipe OD (in inches)} + \text{additional allowance for insertion (if unsure use 6 inches)}$

# Design Manual Items Approved for 2026

**Table 2C-3.04:** Design Parameters for Two Pipes

Pipe Penetrations in Manhole	Pipe Angle with Respect to Reference Point	Pipe Angle Equations		Final Angle	Allowable Angle Range
		Initial Angle	Additional Angle to Account for Structural Leg		
Pipe A (Reference Pipe)	0°	$a^\circ = 2x \sin^{-1}\left(\frac{0.5x P_A}{r}\right)$	$\Phi_{a^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$A^\circ = a^\circ + \Phi_{a^\circ}$	$A^\circ < 180^\circ$
Pipe B	X°	$b^\circ = 2x \sin^{-1}\left(\frac{0.5x P_B}{r}\right)$	$\Phi_{b^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$B^\circ = b^\circ + \Phi_{b^\circ}$	$X^\circ - \frac{B^\circ}{2} > \frac{A^\circ}{2}$

**Table 2C-3.05:** Design Parameters for Three Pipes

Pipe Penetrations in Manhole	Pipe Angle with Respect to Reference Point	Pipe Angle Equations		Final Angle	Allowable Angle Range
		Initial Angle	Additional Angle to Account for Structural Leg		
Pipe A (Reference Pipe)	0°	$a^\circ = 2x \sin^{-1}\left(\frac{0.5x P_A}{r}\right)$	$\Phi_{a^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$A^\circ = a^\circ + \Phi_{a^\circ}$	$A^\circ < 180^\circ$
Pipe B	X°	$b^\circ = 2x \sin^{-1}\left(\frac{0.5x P_B}{r}\right)$	$\Phi_{b^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$B^\circ = b^\circ + \Phi_{b^\circ}$	$X^\circ - \frac{B^\circ}{2} > \frac{A^\circ}{2}$
Pipe C	Y°	$c^\circ = 2x \sin^{-1}\left(\frac{0.5x P_C}{r}\right)$	$\Phi_{c^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$C^\circ = c^\circ + \Phi_{c^\circ}$	$Y^\circ - \frac{C^\circ}{2} > X^\circ + \frac{B^\circ}{2}$ and $Y^\circ + \frac{C^\circ}{2} < 360^\circ - \frac{A^\circ}{2}$

**Table 2C-3.06:** Design Parameters for Four Pipes

Pipe Penetrations in Manhole	Pipe Angle with Respect to Reference Point	Pipe Angle Equations		Final Angle	Allowable Angle Range
		Initial Angle	Additional Angle to Account for Structural Leg		
Pipe A (Reference Pipe)	0°	$a^\circ = 2x \sin^{-1}\left(\frac{0.5x P_A}{r}\right)$	$\Phi_{a^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$A^\circ = a^\circ + \Phi_{a^\circ}$	$A^\circ < 180^\circ$
Pipe B	X°	$b^\circ = 2x \sin^{-1}\left(\frac{0.5x P_B}{r}\right)$	$\Phi_{b^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$B^\circ = b^\circ + \Phi_{b^\circ}$	$X^\circ - \frac{B^\circ}{2} > \frac{A^\circ}{2}$
Pipe C	Y°	$c^\circ = 2x \sin^{-1}\left(\frac{0.5x P_C}{r}\right)$	$\Phi_{c^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$C^\circ = c^\circ + \Phi_{c^\circ}$	$Y^\circ - \frac{C^\circ}{2} > X^\circ + \frac{B^\circ}{2}$
Pipe D	Z°	$d^\circ = 2x \sin^{-1}\left(\frac{0.5x P_D}{r}\right)$	$\Phi_{d^\circ} = \frac{Sx 180^\circ}{\pi x r}$	$D^\circ = d^\circ + \Phi_{d^\circ}$	$Z^\circ - \frac{D^\circ}{2} > Y^\circ + \frac{C^\circ}{2}$ and $Z^\circ + \frac{D^\circ}{2} < 360^\circ - \frac{A^\circ}{2}$

NOTE: Pipe D is not displayed on Figure 2C-3.05, but it would follow the same convention as Pipe A, Pipe B, and Pipe C as displayed on the diagram.



# Design Manual Items Approved for 2026

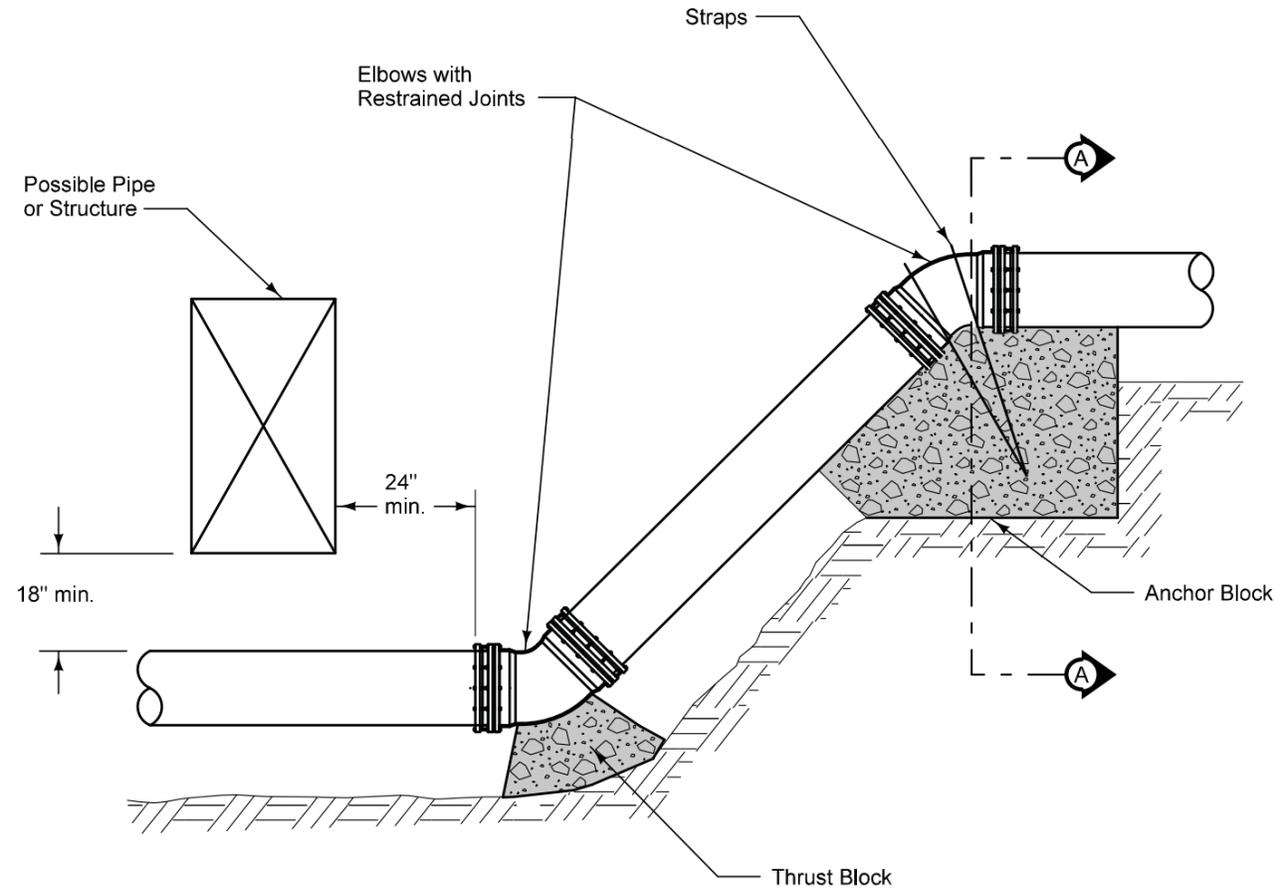
**Table 2C-3.04:** Minimum Manhole Diameter Required for Pipe Size

Pipe Diameter (inches)	Minimum Manhole Diameter (inches)					
	<i>RCP</i>	<i>PVC</i>	<i>DIP</i>	<i>VCP</i>	<i>Polypropylene</i>	<i>HDPE</i>
8	N/A	48	48	48	N/A	N/A
10	N/A	48	48	N/A	N/A	N/A
12	48	48	48	48	48	48
14	N/A	N/A	48	N/A	N/A	N/A
15	48	48	N/A	48	48	48
16	N/A	N/A	48	N/A	N/A	N/A
18	48	48	48	N/A	48	48
20	N/A	N/A	48	N/A	N/A	N/A
21	48	48	N/A	48	N/A	N/A
24	48	48	48	N/A	48	48
27	*60	48	N/A	48	N/A	N/A
30	*60	*60	*60	60	60	60
33	*60	N/A	N/A	N/A	N/A	N/A
36	*60	*60	*60	60	60	60
42	*72			72	N/A	N/A
48	*84				72	72
54	96				N/A	N/A
60	96				96	96

\*48 inch diameter tee-section manhole may be used for storm sewer pipes 27 inches and greater, up to 48 inches.



# Design Manual Items Approved for 2026

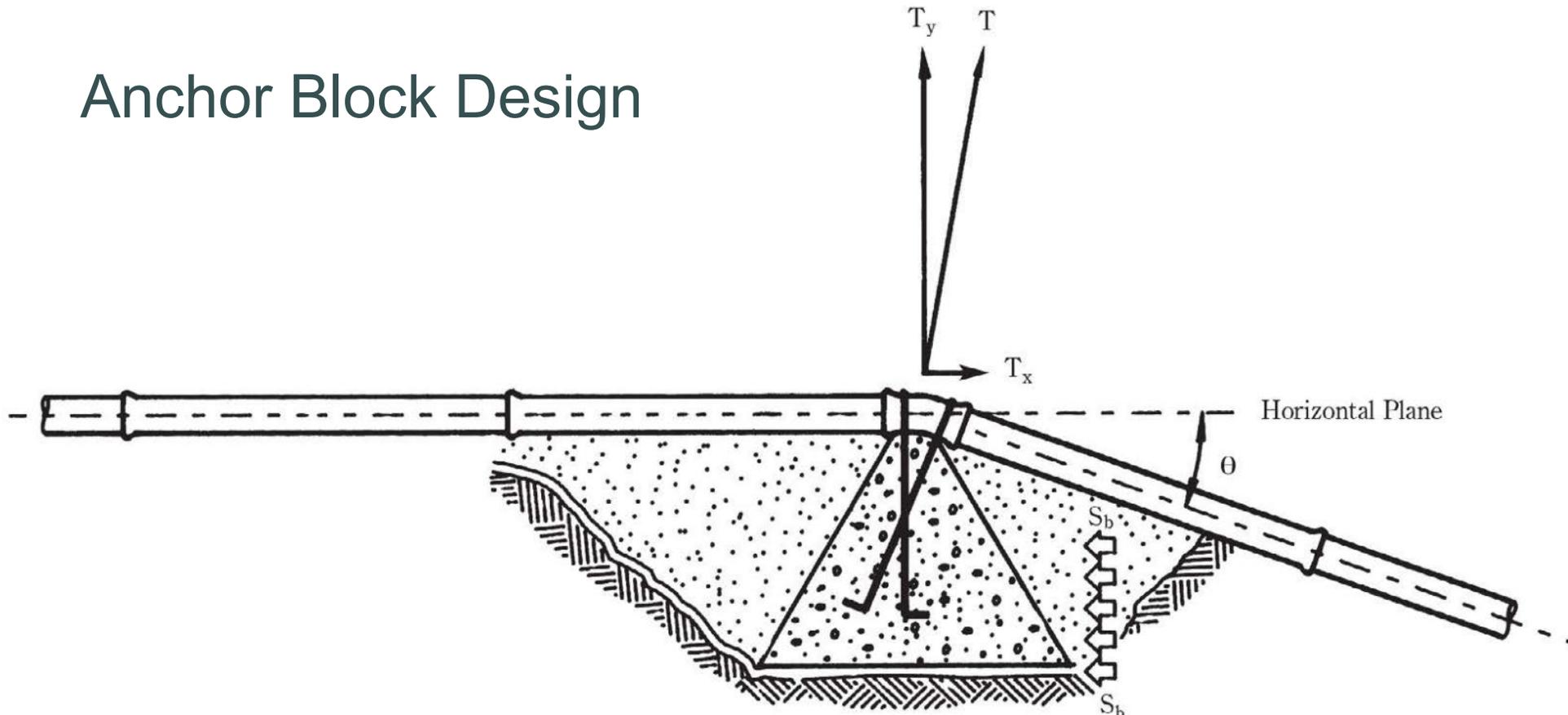


# Design Manual Items Approved for 2026

- Didn't have a design standard for "Anchor Blocks"
- Doesn't include the AWWA recommended safety factor ( $S_f$ ) of 1.5
- Some inconsistencies in regards to use of "Thrust Blocks" vs. "Restraint Joints"
- "Belts & suspenders" approach - using restraint joints in conjunction with thrust blocks.

# Design Manual Items Approved for 2026

## Anchor Block Design



## K. Thrust Blocks, Anchor Blocks, and Restrained Joints

Concrete thrust blocks, anchor blocks, and restrained joints are used to counteract joint movement at points where piping changes directions or at dead-ends.

- 1. Thrust Blocks:** Concrete thrust blocks are typically used on pipes 16 12 inches in diameter or smaller on horizontal and upward bending fittings. Thrust blocks may be used on other pipes independently or in combination with restrained joints. Table 4C-1.01 assumes a bearing area of thrust blocks based on 1,000 psf soil pressure and 150 psi water pressure. Where water pressures are higher and/or soil conditions are poor, the designer should design the correct block size using the equation below Table 4C-1.01. No bolts should come into contact with the concrete thrust blocks. If necessary, polyethylene wrap should be wrapped around the pipe, including the bolt circle, before the concrete is placed. Concrete should have a minimum compressive strength of 4,000 psi at 28 days.

**Table 4C-1.01:** Thrust Block Minimum Bearing Surface (SF)

Pipe Size (inches)	Bends				Tee or Dead-end
	11.25°	22.5°	45°	90°	
4	1	1 2	2 3	4	3
6	1 2	2 3	4 5	8	6
8	2	4	7 8	14	10
10	3	6	11 12	21	15
12	4 5	8 9	16	29 30	21
14	5 6	11	21 22	39 40	28
16	7	14	27 28	50 51	36
18	9	17 18	34 35	63 64	45
20	11	21 22	42 43	78	55
24	15 16	31	60 61	111	78 79
30	24	47 48	92 93	171	121
36	34	67 68	132 133	244 245	173

Note: Areas based upon water pressure of 150 psi and allowable soil pressure of 1,000 psf. *AWWA Recommends a 1.5 factor of safety (S<sub>f</sub>), which is not part of this table or the formula below.*

$$\text{Required Area, ft}^2 = \frac{S_f (2) (\text{water pressure, psi})(\text{cross-sectional area of pipe outside diameter, in}^2)}{(\sin(\text{angle of bend} / 2))(\text{allowable soil pressure, psf})}$$

- 2. Anchor Blocks:** Anchor blocks are typically used on pipes 12 inches in diameter or smaller on vertical downward bend fittings. Mains larger than 12 inches should use restrained joints as the primary means of thrust restraint on vertical downward bend fittings. Anchor blocks may be used on pipes independently or in combination with restrained joints. Table 4C-1.02 size of the anchor block based on a 150 psi water pressure. Where water pressures are higher, the designer should design the correct block size using the equation below Table 4C-1.02. Where an anchor block is the sole means of restraint on a vertical downward bend, the plans should detail the size and shape of the anchor block. The engineer should also verify the face of the anchor block can resist the horizontal thrust component (T<sub>x</sub>) created by the fitting. No bolts should come into contact

with the concrete thrust blocks. If necessary, polyethylene wrap should be wrapped around the pipe, including the bolt circle, before the concrete is placed. Concrete should have a minimum compressive strength of 4,000 psi at 28 days.

**Table 4C-1.02:** Anchor Block Sizing

Pipe Diameter	Degree Bend (°)	Weight (Pounds)	Volume (Cu. Yards) (V <sub>g</sub> )	Strap Bar Size <sup>1</sup>	Embedment <sup>1</sup>
4	11.25	530	0.1	#5	18
	22.5	1,040	0.3		
	45	1,920	0.5		
6	11.25	1,100	0.3	#5	18
	22.5	2,150	0.6		
	45	3,970	1.0		
8	11.25	1,890	0.5	#5	18
	22.5	3,700	1.0		
	45	6,830	1.7		
10	11.25	2,840	0.7	#5	18
	22.5	5,560	1.4		
	45	10,270	2.6		
12	11.25	4,010	1.0	#5	18
	22.5	7,860	2.0		
	45	14,520	3.6		
14	11.25	5,390	1.4	#5	18
	22.5	10,560	2.7	#6	24
	45	19,510	4.9	#8	30
16	11.25	6,960	1.8	#5	18
	22.5	13,650	3.4	#7	24
	45	25,230	6.3	#9	30

<sup>1</sup> - Values were taken from the Oregon DOT Standard Detail RD250 Table C

Values in the table have a safety factor S<sub>f</sub> = 1

$$V_g = S_f PA \sin\Theta / W_m \quad T_x = PA (1 - \cos\Theta)$$

### 23. Restrained Joints:

- For Pipe Diameters 8 inch through 12 inch:** Provide a minimum of 40 feet of restrained pipe in all directions along the pipe from the fitting for pipe diameters 8 inch through 12 inch, depths of bury of at least 5 feet, and a maximum test pressure of 150 psi.
- For Pipe Diameters Greater than 14 12 inch:** Restrained joints are typically used on pipes larger than 14 12 inches in diameter. They may be used on other pipe sizes independently or in combination with concrete thrust blocks. See pipe manufacturer's recommendations for determining restrained lengths of pipe required.

# Specifications Items Approved for 2026

- Progress payment retainage (Section 1090, 1.05, B)
  - Lowered maximum retainage from 5% to 3%  
(Per SF 574)
- Concrete pipe supports (Section 3010, 1.08, F and G)
  - Added bid items for pipe supports for new and existing utilities
- Pipe size for solid wall PVC pipe (Section 4010, 2.01, B)
  - Increased from 27" to 48" - complies with ASTM F 679 and conforms to current SUDAS design tables for buried depths

# Specifications Items Approved for 2026

- Pipe size for closed profile PVC pipe (Section 4010, 2.01, D)
  - Increased from 36” to 60” - complies with ASTM F 1803 and conforms to current SUDAS design tables for buried depths
- Infiltration barrier on polypropylene adjustment rings (Section 6010, 2.09, A, 3 & 2.11, A, 4)
  - Removed language prohibiting the use of heat shrinkable infiltration barriers with polypropylene adjustment rings
- Dowel bar retrofit
  - Minor changes at the request of Iowa DOT - now a joint detail

# Specifications Item

## 2.01 TESTING EQUIPMENT

**A. General:** Comply with applicable sections of ASTM, **NASSCO Specifications**, and other applicable industry standards and codes.

### **B. Video Inspection:**

1. Camera:
  - a. High-resolution color with adjustable iris focus.
  - b. Pan and tilt capabilities.
  - c. Integral lighting suitable to provide proper illumination and a clear video image of the entire periphery of the pipe.
  - d. Capable of operating in 100% humidity conditions.
  - e. Produce a **high quality** video image.
2. Provide closed-circuit video inspection equipment capable of displaying on-screen footage of distance measured to within 1% of actual distance.
3. Record the inspection in color in the recording media specified by the Engineer. Forward the recording to the Engineer.

## 3.02 VIDEO INSPECTION

### **A. General:**

1. Unless otherwise specified in the contract documents, conduct video inspection of all new and rehabilitated sanitary and storm sewers after all backfill and compaction operations are completed, but prior to paving.
2. Notify the Engineer the day prior to inspection so the Engineer may be present during the inspection.
3. **Complete inspections under the supervision of a competent employee who has completed NASSCO's Pipeline Assessment Certification Program (PACP).**
4. Notify the Engineer of the extent of noncompliance with the low spot depth tolerances in Section 4010 for sanitary sewers and Section 4020 for storm sewers.
5. Re-inspect sewers after any corrective action has been completed.

### **B. Inspection Procedure:**

1. Prior to video inspection, run sufficient water through the pipe to saturate potential low spots so they may be detected during inspection.
2. Inspect each pipe segment between manholes or access points in a single, continuous run. Progress through the entire project in a uniform direction.
3. **Pan camera around the circumference of each joint per NASSCO requirements.**
4. Inspect all lateral connections and other observations at right angles utilizing the pan and tilt capabilities of the camera.
5. Center the video camera in the pipe during the inspection.
6. Do not exceed 30 feet of inspection per minute.

### **C. Inspection Reporting:**

1. Provide a copy of the video inspection including on-screen continuous footage, pipe diameter, direction of viewing, and manhole and street location references in the recording. Affix labels to the recording media to include the name of the project, the date, and the location of the inspection.
2. Provide a written report of the inspection. In the report, include true-to-scale drawings of all sewer defects and observation locations. Reference the time stamp on each line item entry on the written report.

**D. Inspection Acceptance:** The Engineer may reject **low quality videos** or videos failing to meet specifications. **Any reinspection will be conducted at the Contractor's expense.**

1. **Videos can be rejected if the speed or comprehensiveness of the pan and tilt provided in the video does not allow full inspection of a lateral connection and joints.**
2. **Full observation of the new or rehabilitated pipe is required in the video provided after the inspection. If the amount of water, debris within the pipe, equipment present in the pipe, or other circumstances during the inspection results in a video not allowing the full observation of new or rehabilitated sewer pipe, the inspection can be rejected.**



# Specifications Items Approved for 2026

## 3.06 SUBGRADE PREPARATION

### B. Subgrade Stability:

1. Perform proof rolling **no more than 7 days prior to paving operations** with a truck loaded as **designated approved** by the Engineer using either:
  - a. A single axle or tandem truck fully loaded with rock or soil to the top of the truck's sideboards; or
  - b. A single axle truck loaded with a rear axle weight of 13,500 pounds and total vehicle weight of 20,000 pounds or a tandem axle truck loaded with rear axle weight of 34,000 pounds and a total weight of 46,000 pounds. Verify axle and truck weights by tickets from a certified scale.
2. Operate trucks at less than 10 mph. Make multiple passes for every lane. The subgrade will be considered to be unstable if, under the operation of the loaded truck, the surface shows yielding (soil wave in front of the loaded tires) or rutting of more than 2 inches, measured from the top to the bottom of the rut at the outside edges.
3. If soft or yielding areas are located, remove unstable materials and replace with suitable foundation materials as approved by the Engineer, meeting Section 2010, 2.04. Compact subgrade materials in cut sections as required by the Engineer. If stabilization material is used, place and compact as required for subbase.
4. **If more than 7 days pass, unsuitable material was replaced, or if rain occurs before the paving operation begins, perform proof rolling again unless waived by the Engineer.**

# Supplementals on Website

## Supplemental Specifications

### General Supplemental Specifications

The following items have been approved by the SUDAS Board of Directors. These items will be included in the 2026 Edition of the SUDAS Standard Specifications in December. Click on the topic title for the marked up version of the revision; click on the section reference for a clean version of the section that incorporates the change.

**Progress payment retainage** (Section 1090, 1.05, B)

A new law was signed 4/25/25 lowering the maximum amount of retainage.

**Proof rolling** (Section 2010, 3.06, B)

Modify language to add expiration and conditions to require proof rolling.

**Concrete pipe supports** (Section 3010, 1.08, F and G)

Add bid items to pay for concrete pipe supports of new and existing structures.

## Supplemental Design

### General Supplemental Design Standards

The following items have been approved by the SUDAS Board of Directors and available for use. These items will be included in the 2026 Edition of the SUDAS Design Standards in December. Click on the topic title for the marked up version of the revision; click on the section reference for a clean version of the section that incorporates the change.

**Determining structure diameter** (Sections 2C-3, G, and 3C-1, L, 10)

Consider modifications based on National Precast Concrete Association.

**Thrust block and anchor block sizing** (Design Section 4C-1, K)

Modify thrust block sizing chart based on calculations. Add formula and table for anchor block sizing.

# Items for 2027

- Removal of slump testing for slipform paving
- Updating testing frequencies for PCC portable/batch plants
- Gravel road and shoulder specifications
- Inclusion of PEXa for water service leads



# PWSB

Public Works Service Bureau

*Communicate to Innovate*

Providing valuable resources  
for public works staff

Connect with colleagues

Learn new techniques

Improve work efficiencies



Infrastructure is the lifeblood of all Iowa cities, no matter their size. Public works staff everywhere are on the front lines facing the challenge of building and maintaining that infrastructure—they don't have the option of leaving a sewer line clogged, letting the water run from a broken water main, leaving the snow unplowed, or taking time off during an unprecedented storm. We can help with that challenge!



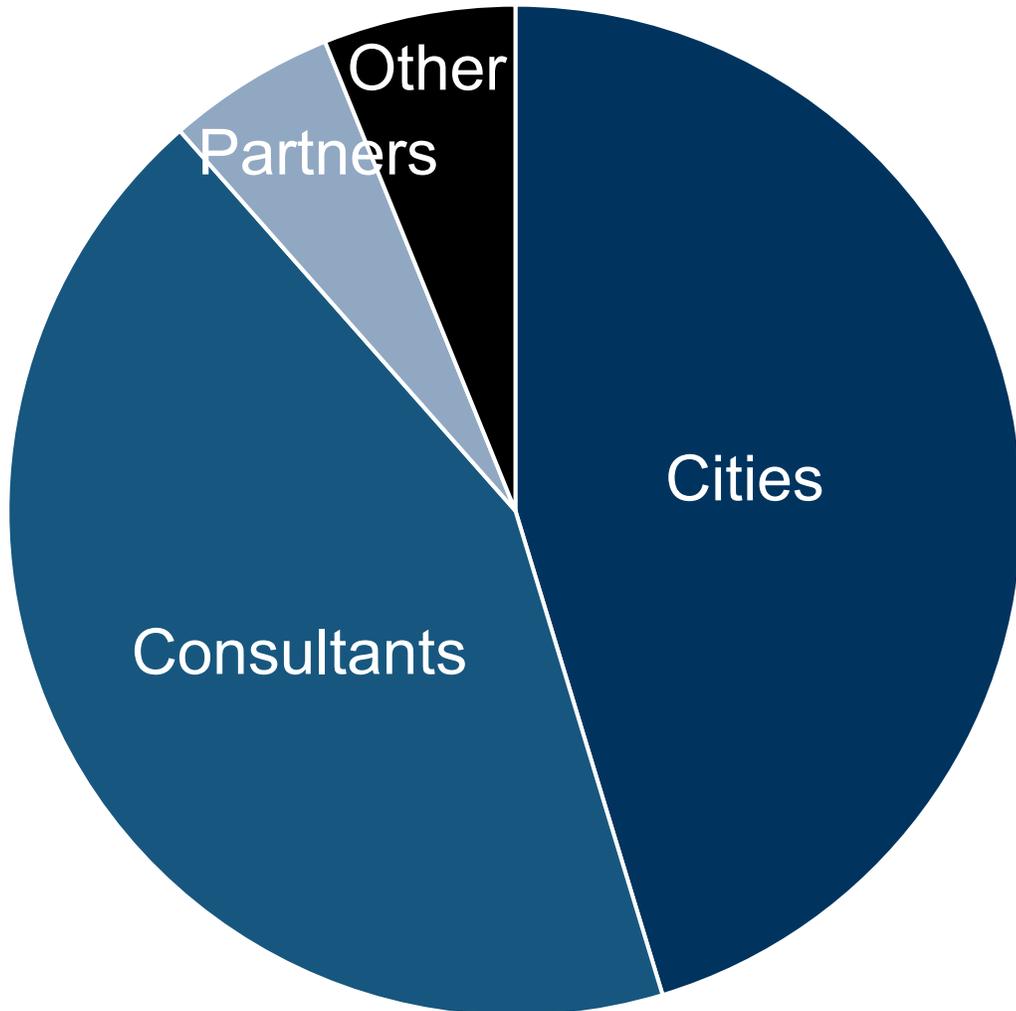
# Connect with Colleagues

- Member Contacts
  - ✓ Currently over 800 members
  - ✓ All sortable and searchable

		Population Range	Type of Organization			Search		
						<a href="#">CSV</a>	<a href="#">Print</a>	
Last Name	First Name	Title	Organization	Phone--Office	Email	Organization Type	City	Population Range



# PWSB Membership



Type	Total	Unique
Cities	363	145
Consultants	346	55
Partners*	43	22
Other**	49	24

\* i.e. DOT, DNR, LTAP, League, Counties

\*\*i.e. Universities, Industry Reps, etc.

# Connect with Colleagues

- Forums

- ✓ 7 categories (budgeting, open, research, ROW management, staffing, streets, training)
- ✓ Can subscribe to any/all categories of interest
- ✓ Emails sent to registered users

Search Forums... **Search**

Forum	Discussions	Replies	Last Post
Budgeting	4	6	4 months, 3 weeks ago  David Carney

## David Carney

Title: Director  
Organization: SUDAS/PWSB  
Address: 2711 S. Loop Drive Suite  
Phone–Office: 15152960582  
Phone–Cell:  
Number of Employees: 2  
Email: [dpcarney@iastate.edu](mailto:dpcarney@iastate.edu)



# Recent Forum Discussions

- Community box units (mailboxes)
- Land surveyor required?
- Foundation drain connection to sanitary sewer
- Pressure grouting in storm sewer pipes
- General guidance (seeking mentorship)
- Combining public works and parks
- Budgeting enterprise funds
- Sanitary sewer manhole lining
- Playground mulch suggestions





# PWSB

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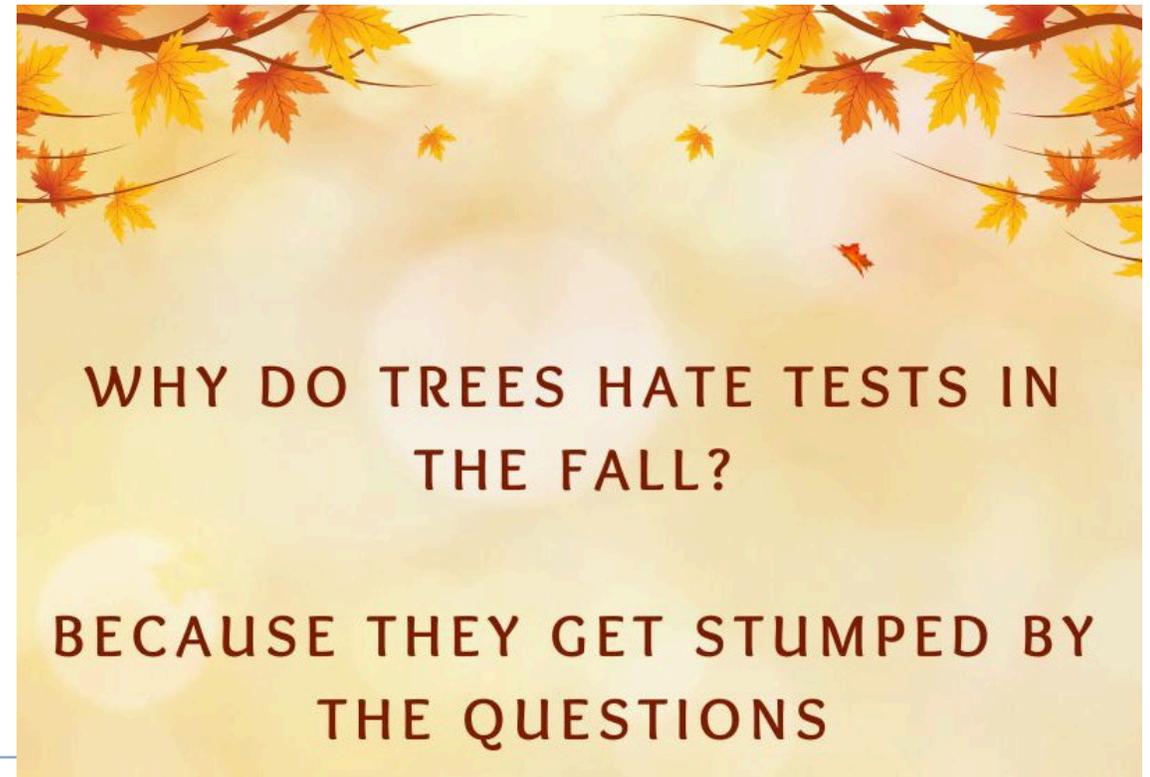


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# Learn New Techniques

- Training and Educational Opportunities
- Headlines
- Funding Opportunities





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# Improve Work Efficiencies

- Bid tabulation report
  - ✓ Over 700 accepted bids included; constantly adding new
  - ✓ Data submitted voluntarily
  - ✓ Uses SUDAS bid item codes
  - ✓ Always accepting new bid tabs (please send in Excel)

# Bid Tabulation Costs Report

## SUDAS Item Division

All

## Bid Item Search

7010

## Year

All

## Iowa DOT District

All

## City

Search

## Population Range, City

All

Click to Reset Filters

To view item details, right-click item, select 'Drill through' and click 'Details.'



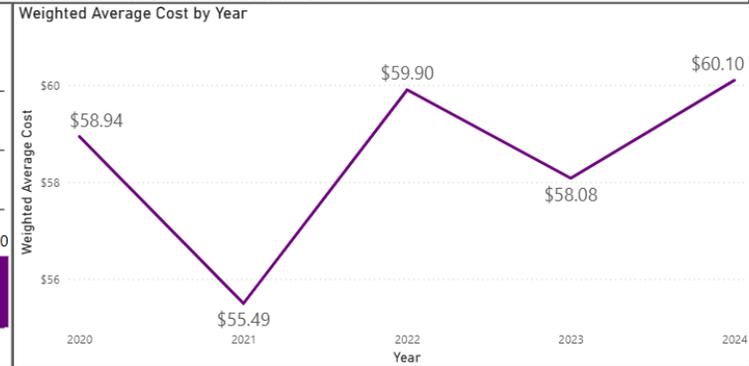
Bid Item	Item Type	Item Size	Thickness	Min. Price	Median Price
7010-A - Pavement, PCC (SY)			4.00	\$45.00	\$87
7010-A - Pavement, PCC (SY)			5.00	\$6.00	\$57
7010-A - Pavement, PCC (SY)			6.00	\$6.50	\$65
7010-A - Pavement, PCC (SY)			6.50	\$64.50	\$64
7010-A - Pavement, PCC (SY)			7.00	\$10.18	\$69
7010-A - Pavement, PCC (SY)			7.00	\$56.00	\$56
7010-A - Pavement, PCC (SY)			7.00	\$54.25	\$54
7010-A - Pavement, PCC (SY)			8.00	\$8.95	\$75
7010-A - Pavement, PCC (SY)			8.00	\$68.50	\$68
7010-A - Pavement, PCC (SY)			9.00	\$30.00	\$78
7010-A - Pavement, PCC (SY)			9.00	\$56.10	\$56
7010-A - Pavement, PCC (SY)			9.00	\$88.00	\$88
7010-A - Pavement, PCC (SY)			9.00	\$75.00	\$75
7010-A - Pavement, PCC (SY)			9.00	\$94.00	\$94
7010-A - Pavement, PCC (SY)			9.00	\$160.00	\$160
7010-A - Pavement, PCC (SY)			9.50	\$88.00	\$90
7010-A - Pavement, PCC (SY)			10.00	\$65.50	\$97
7010-A - Pavement, PCC (SY)			10.00	\$101.25	\$101
7010-A - Pavement, PCC (SY)			10.00	\$56.50	\$56
7010-A - Pavement, PCC (SY)			11.00	\$76.00	\$76
7010-A - Pavement, PCC (SY)			12.00	\$125.00	\$125
7010-A - Pavement, PCC (SY)	PCC		10.00	\$73.25	\$92
7010-E - Curb and Gutter (LF)				\$22.50	\$22

## Detail View

Click to Clear Filters

Population: All City: Search Iowa DOT District: All Year: All

Item	City	Bid Date	Type	Size	Thickness	Quantity	Unit Price	Total Cost	Population Range	Layer	Aggregate Size	Binder Grade	Mix Design Level
7010-A - Pavement, PCC (SY)	Des Moines	2/11/2020			7.00	10.00	\$140.00	\$1,400	100,000 or greater				
7010-A - Pavement, PCC (SY)	West Union	4/15/2021			7.00	18.00	\$100.00	\$1,800	2,001-5,000				
7010-A - Pavement, PCC (SY)	West Des Moines	6/21/2021			7.00	20.00	\$150.00	\$3,000	50,000-99,999				
7010-A - Pavement, PCC (SY)	West Union	1/29/2021			7.00	22.60	\$100.00	\$2,260	2,001-5,000				
7010-A - Pavement, PCC (SY)	West Des Moines	4/4/2022			7.00	25.10	\$200.00	\$5,020	50,000-99,999				
7010-A - Pavement, PCC (SY)	Des Moines	5/31/2022			7.00	26.00	\$100.00	\$2,600	100,000 or greater				
7010-A - Pavement, PCC (SY)	Lewis	8/10/2021			7.00	32.00	\$72.00	\$2,304	251-500				
7010-A - Pavement, PCC (SY)	Vinton	7/17/2020			7.00	34.00	\$100.00	\$3,400	2,001-5,000				
7010-A - Pavement, PCC (SY)	Urbandale	2/7/2024			7.00	35.00	\$120.00	\$4,200	25,001-49,999				
7010-A - Pavement, PCC (SY)	Des Moines	3/29/2022			7.00	41.00	\$85.00	\$3,485	100,000 or greater				
7010-A - Pavement, PCC (SY)	Davenport	6/3/2022			7.00	50.00	\$85.00	\$4,250	100,000 or greater				



# Improve Work Efficiencies

- Public works salary survey
  - ✓ Collecting salary data for CITY public works staff starting with FY 2026
  - ✓ Two reports – 1) populations  $\geq 10,000$ ; 2) populations  $< 10,000$  – have “categories” for the larger populations
  - ✓ Data submission forms and instructions on website

# Salary Survey for Populations over 10,000

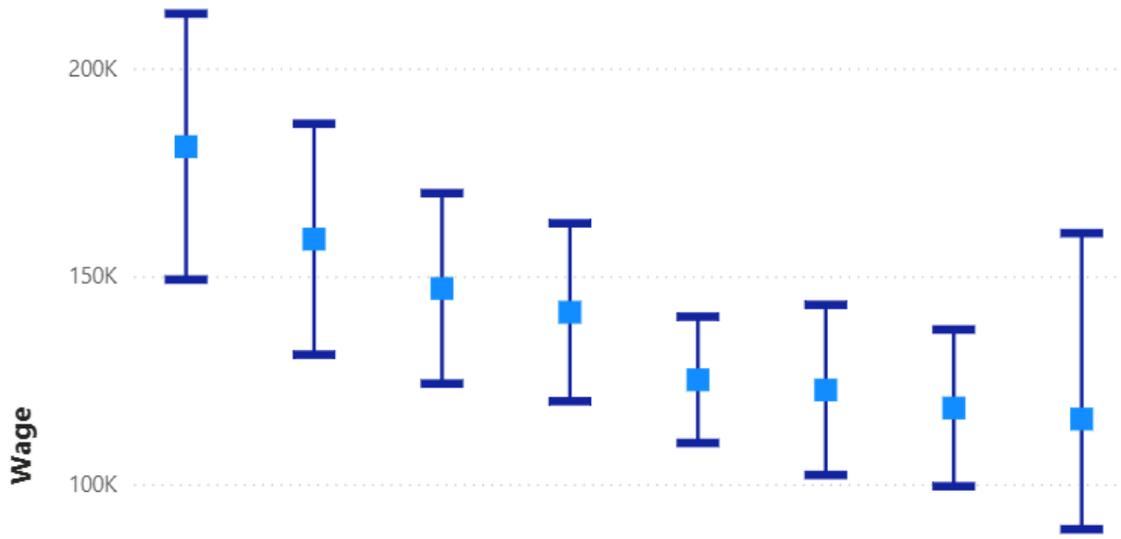
This salary survey focuses on cities with populations exceeding 10,000, offering comprehensive data on local compensation trends across various categories and job roles. It provides valuable insights for businesses and professionals to assess competitive pay structures and make informed decisions. Don't see your city on the report below? Submit your data [here](#).

**NOTE – you must select a category and position to have a visual show up below.** Click on the arrow on the right to clear all of your selections and start over. In the gray bar under the chart, you click on the > button to get to sheet 2 of this report, which shows all of the data in a table format.

FY: 2026 | City: All | Category: Engineering | Position: City Engineer | Population Range: All



Average, Minimum, and Maximum Annual Wage by City



Average, Minimum, and Maximum Hourly Wage by City

Wage

**NOTE** – you must select a category and position to have a visual show up below. Click on the arrow on the right to clear all of your selections and start over. In the gray bar under the chart, you click on the **>** button to get to sheet 2 of this report, which shows all of the data in a table format.

FY	City	Category	Position	Alternate Position Title	Minimum Wage	Maximum Wage	Average Wage	Overtime	Compe
2026		Streets	Assistant Superintendent	Assistant Streets Superintendent				Overtime Eligible	Hourly
2026		Water and Waste Water Operations	Assistant Superintendent	Assistant Utilities Superintendent				Overtime Eligible	Hourly
2026		Parks and Recreation	Assistant Superintendent Parks Maintenance	Assistant Park Superintendent				Overtime Eligible	Hourly
2026		Engineering	City Engineer	City Engineer				Overtime Exempt	Annual
2026		Engineering	Civil Engineer	Civil Engineer I				Overtime Eligible	Hourly
2026		Engineering	Engineering Tech	Engineering Tech I				Overtime Eligible	Hourly
2026		Engineering	Engineering Tech	Engineering Tech II				Overtime Eligible	Hourly
2026		Water and Waste Water Operations	Maintenance Operator (Certification Required)	Utility Operator I				Overtime Eligible	Hourly
2026		Water and Waste Water Operations	Maintenance Operator (Certification Required)	Utility Operator II				Overtime Eligible	Hourly
2026		Parks and Recreation	Maintenance Worker (CDL Required)	Parks Operator I				Overtime Eligible	Hourly
2026		Streets	Maintenance Worker (CDL Required)	Streets Operator I				Overtime Eligible	Hourly
2026		Fleet	Mechanic	Mechanic				Overtime Eligible	Hourly
2026		Parks and Recreation	Parks/Cemetery Maintenance Superintendent	Parks Supperintendent				Overtime Eligible	Hourly
2026		Administration	Public Works Director	Public Works Director				Overtime Exempt	Annual
2026		Water and Waste Water Operations	Public Works Director/City Engineer	Utility Director				Overtime Exempt	Annual
2026		Engineering	Senior Engineer	Civil Engineer II				Overtime Eligible	Hourly
2026		Engineering	Senior Engineer	Civil Engineer III				Overtime Eligible	Hourly
2026		Parks and Recreation	Senior Maintenance Worker/Labor Supervisor	Parks Operator II				Overtime Eligible	Hourly
2026		Streets	Senior Maintenance Worker/Labor Supervisor	Streets Operator II				Overtime Eligible	Hourly
2026		Streets	Superintendent	Streets Supperintendent				Overtime Eligible	Hourly
2026		Water and Waste Water Operations	Superintendent	Utilities Supperintendent				Overtime Eligible	Hourly
2026		Water and Waste Water Operations	Utility Stormwater Specialist	Stormwater Coordinator				Overtime Eligible	Hourly
2026		Administration	Administrative Assistant/Secretary	Principal Clerk				Overtime Exempt	Annual
2026		Administration	Administrative Assistant/Secretary	Public Works Management Analyst				Overtime Exempt	Annual

# Salary Survey for Populations under 10,000

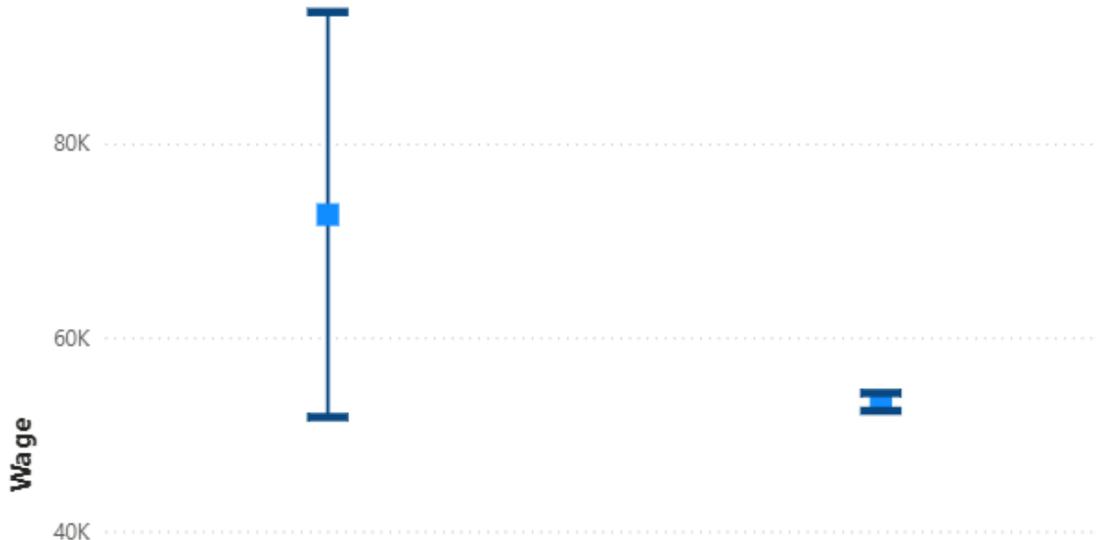
This salary survey focuses on cities with populations below 10,000, offering comprehensive data on local compensation trends across various categories and job roles. It provides valuable insights for businesses and professionals to assess competitive pay structures and make informed decisions. Don't see your city on the report below? Submit your data [here](#).

**NOTE – you must select a position to have a visual show up below.** Click on the arrow on the right to clear all of your selections and start over. In the gray bar under the chart, you click on the > button to get to sheet 2 of this report, which shows all of the data in a table format.

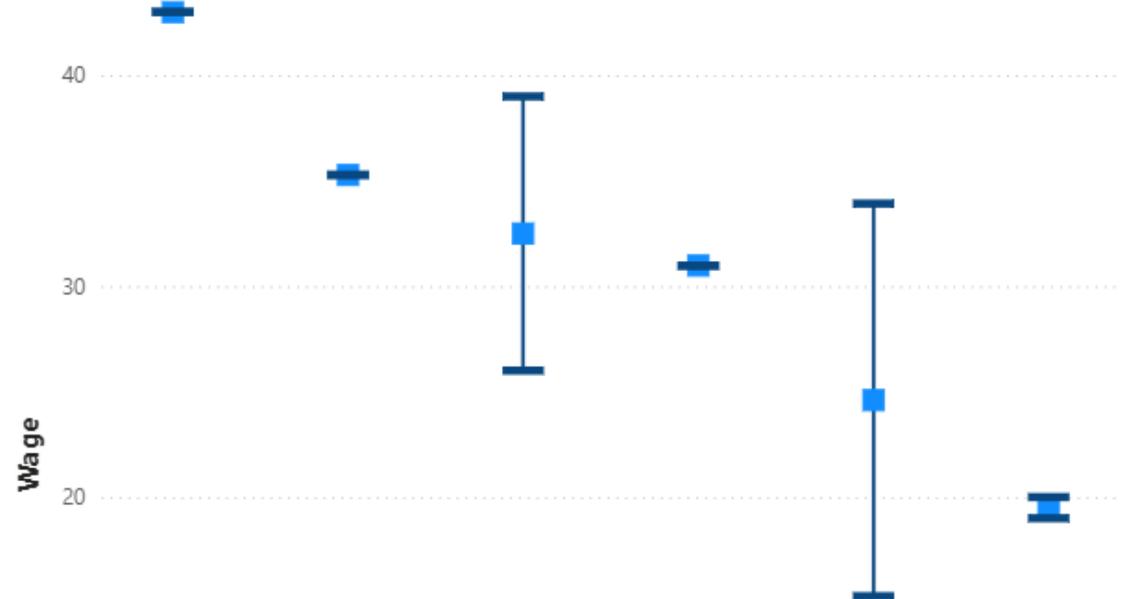
FY: 2026  
City: All  
Position: Water or WWT Plant Superintendent  
Population Range: All



Average, Minimum, and Maximum Annual Wage by City



Average, Minimum, and Maximum Hourly Wage by City



# Salary Data Received From...

**≥10,000**

**51%**

- Altoona
- Ames
- Ankeny
- Bettendorf
- Burlington
- Carroll
- Cedar Rapids
- Clive
- Coralville
- Council Bluffs
- Des Moines
- Fort Dodge
- Grimes
- Marion
- Muscatine
- Newton
- Sioux City
- Urbandale
- Waukee
- West Des Moines

**<10,000**

**6%**

- Adel
- Anita
- Bondurant
- Carson
- Colfax
- Deloit
- Ely
- Fairfield
- Garden Grove
- Hawarden
- Hedrick
- Hiawatha
- Knoxville
- Merrill
- Mingo
- Missouri Valley
- Monticello
- Nashua
- New Albin
- Perry
- Rock Valley
- Smithland
- West Point
- Williamsburg

# Other Resources

- Equipment for Sale (NEW!)
- Utility survey (coming soon)
- Job board
- City supplementals
- Financial, street, and bridge reports
- Social media (Facebook, X, and LinkedIn)
- Email list
  - ✓ Members automatically added
  - ✓ Also link to subscribe from our home page



# Becoming a member is **EASY** and **FREE!**

- Step 1 – Create an Account ([www.iowaPWSB.org](http://www.iowaPWSB.org))
  - ✓ Email
  - ✓ Password
  - ✓ Name

[Anti-spam measure requires staff approval of account]

- Step 2 – Additional Contact Info
  - ✓ Name
  - ✓ Title
  - ✓ Organization
  - ✓ Contact Info



# Questions?



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