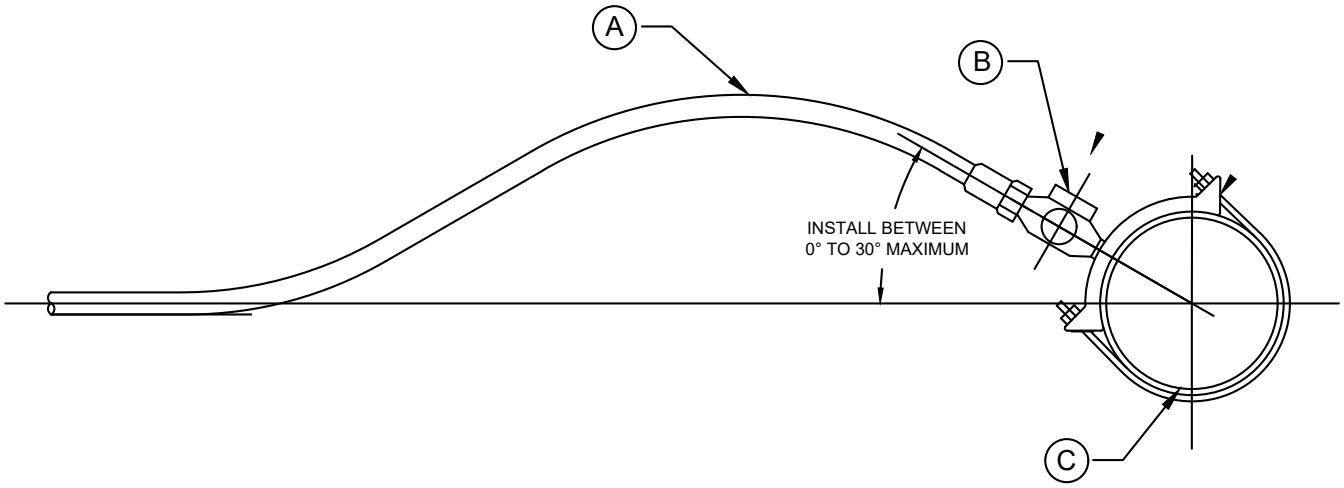
LEGEND:

ITEM	DESCRIPTION

(A) COPPER PIPE (TYPE K-SOFT); OR AWWA C901 HDPE PIPE, IRON PIPE SIZE (IPS), PE4710, SIDR 7, CHLORINE CLASSIFICATION (CC) 3. (IF POLY PIPE IS USED, PLACE #12 GAGE TRACE WIRE ABOVE PIPE; IF COPPER PIPE IS USED, BED PIPE IN SAND.)

(B) BALL TYPE CORPORATION STOP: FORD FB1101-3 W/NPT THREADS OR APPROVED EQ.

(C) SERVICE SADDLE CLAMP DOUBLE STOP BRASS



NOTES:

1. ALL WORK MUST BE INSPECTED BY IMPROVEMENT DISTRICT PERSONNEL OR ENGINEER

2. MINIMUM DISTANCE BETWEEN TAPS 24" WITH A MINIMUM 5° STAGGER.

3. NO TAPS WITHIN 24" FROM THE END OF PIPE.

4. ALL SERVICE TAPS ARE TO BE DONE WITH A TAPPING MACHINE APPROVED BY THE DISTRICT OR ENGINEER.

5. SERVICE SADDLE CLAMP REQUIRED ON ALL TAPS OF PVC PIPE.

6. TEFLON TAPE REQUIRED ON ALL TAPS AND THREADS.

6. TRACER WIRE REQUIRED.

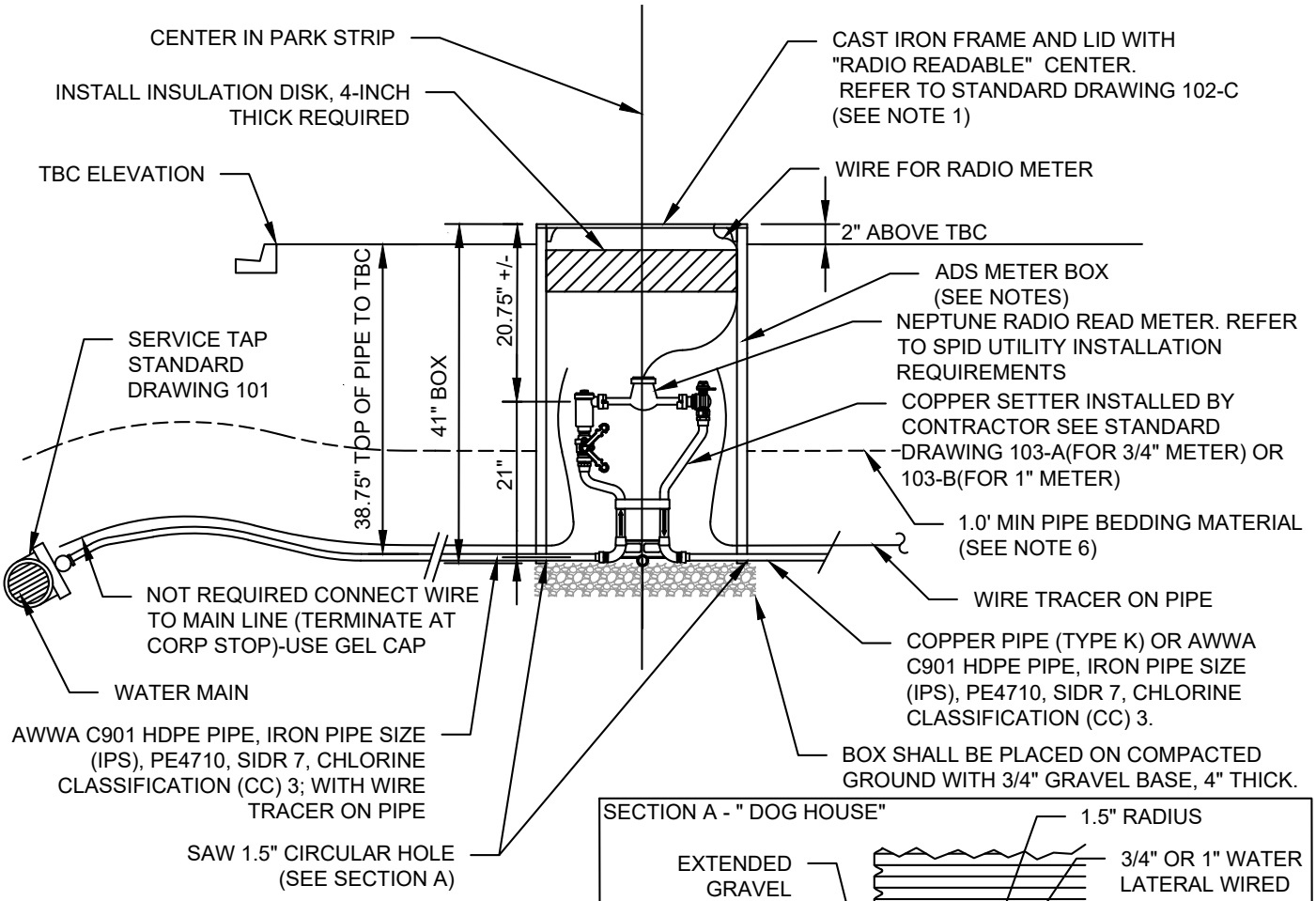
STANDARD DRAWING
101
REV.: 05-14-2026

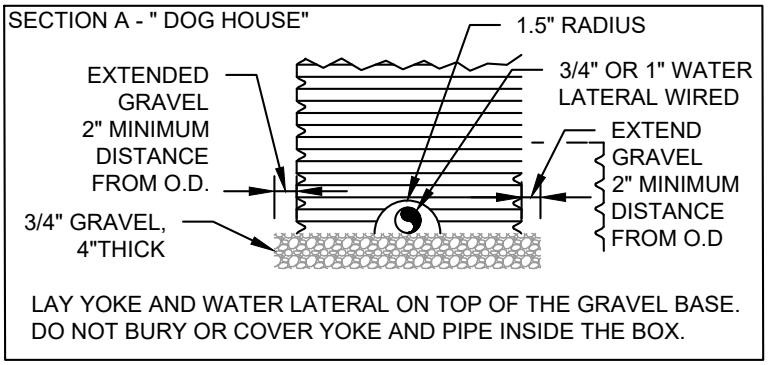
Brendan Thorpe P.E.
District Engineer

STANDARD WATERLINE LOOP

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT





NOTES:

1. METER BOX SHALL BE SET PLUMB AT 2" ABOVE TBC.
2. METERS ARE NOT ALLOWED IN DRIVEWAYS.
3. ADS BOX:
   - 3.1. NOMINAL DIMENSIONS: I.D. = 21"; O.D. = 25"; DEPTH = 41".
   - 3.2. REQUIREMENTS: ADS METER BOXES SHALL HAVE A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS. BASED ON ASTM D 2412 AT 5% DEFLECTION THE PIPE STIFFNESS FOR 21-INCH (525MM) METER BOX SHALL BE 34 pii (235 N/m/mm). METER BOXES SHALL BE NOTCHED AT 0 AND 180 DEGREES AT THE BASE TO ACCOMMODATE INLET AND OUTLET PIPES.
   - 3.3. MATERIAL PROPERTIES: METER BOXES SHALL BE HIGH DENSITY POLYETHYLENE CONFORMING WITH MINIMUM REQUIREMENTS OF CELL CLASSIFICATION 424420 B AS DEFINED AND DESCRIBED IN THE LATEST VERSION OF ASTM D3350
4. CAST IRON COVER CONFORMS TO ASTM A48 CL35B, MANUFACTURED BY D&L FOUNDRY (888-765-8124) CATALOG No. B-5020.
5. PRIOR TO PLACING METER BOX, ENSURE TOP OF THE WATER SERVICE LATERAL AND BOTTOM OF TRENCH IS NO DEEPER THAT 39". IF GRADE IS TOO LOW, RAISE BY PLACING 3/4-INCH GRAVEL (NO LOOSE DIRT). THE BOTTOM OF THE METER YOKE AND PIPE SHALL BE VISIBLE FROM THE INSIDE OF THE BOX AND SHALL BE PLACED ON THE GRAVEL BASED (DO NOT COVER OR BURY YOKE OR PIPE INSIDE METER BOX). THE BOTTOM OF THE METER BOX AND THE BOTTOM OF THE YOKE AND PIPE SHALL BE PLACED AT THE SAME LEVEL. THE DOG HOUSE ACCOMMODATING THE LATERAL SHALL NOT EXCEED 1.5 INCHES IN DIAMETER. USE A CIRCULAR HOLE SAW FOR DOG HOUSE PENETRATION.
6. 1.0' MIN PIPE BEDDING MATERIAL REQUIRED ABOVE TOP OF LATERAL FROM THE MAIN LINE TO THE POINT OF TERMINATION, MINIMUM 10 FEET FROM THE SIDEWALK AND BEHIND ALL OTHER UTILITIES.

STANDARD DRAWING
102-A
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

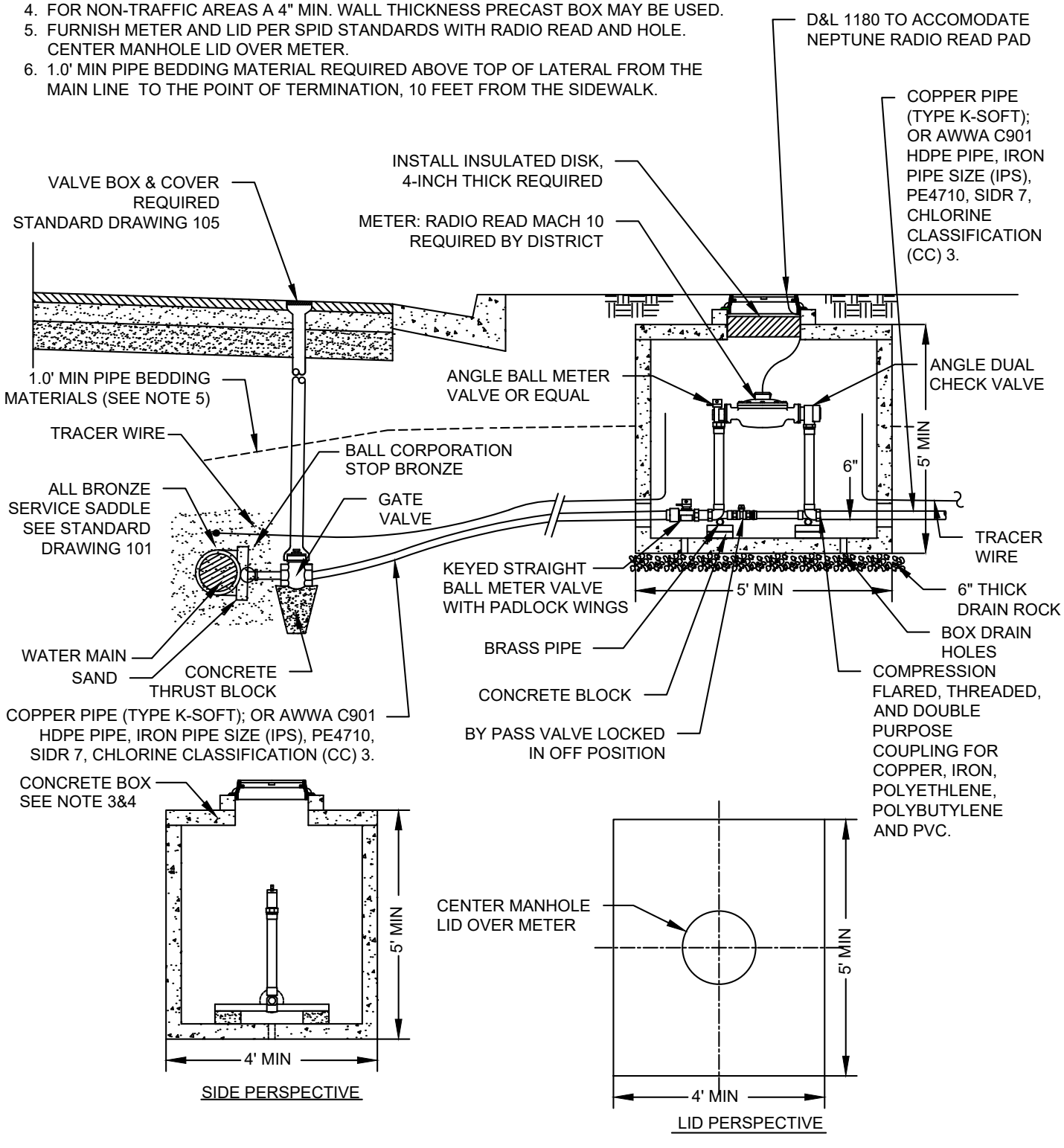
WATER SERVICE CONNECTION FOR 3/4" - 1" METERS

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

NOTES:

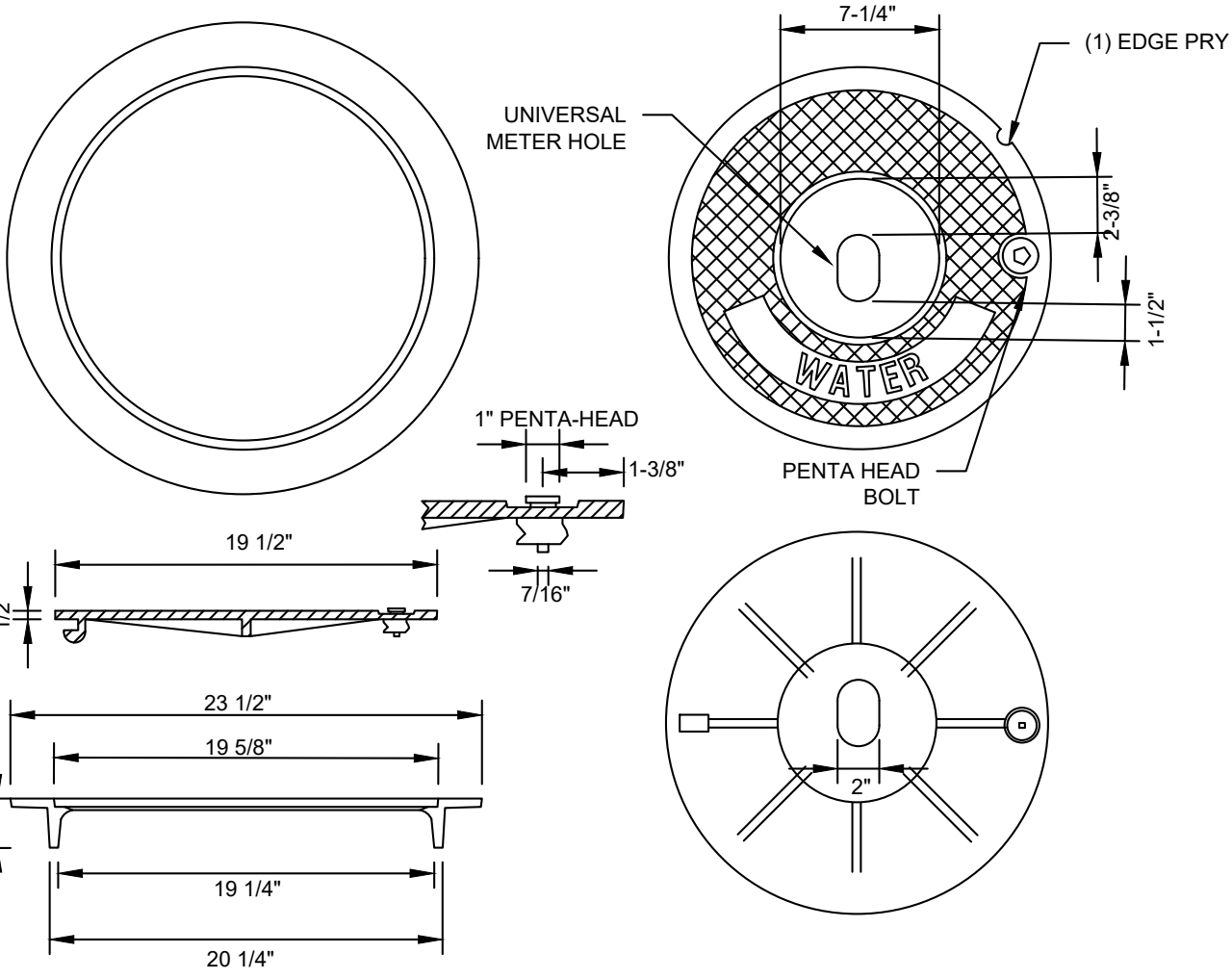
1. METER LID SHALL BE SET PLUMB AND 1.5" TO 3" ABOVE TBC.
2. METER BOXES ARE PROHIBITED IN DRIVE APPROCHES.
3. FOR TRAFFIC AREAS USE A H-20 LOAD PRECAST BOX WITH 6" MIN. WALL THICKNESS.
4. FOR NON-TRAFFIC AREAS A 4" MIN. WALL THICKNESS PRECAST BOX MAY BE USED.
5. FURNISH METER AND LID PER SPID STANDARDS WITH RADIO READ AND HOLE. CENTER MANHOLE LID OVER METER.
6. 1.0' MIN PIPE BEDDING MATERIAL REQUIRED ABOVE TOP OF LATERAL FROM THE MAIN LINE TO THE POINT OF TERMINATION, 10 FEET FROM THE SIDEWALK.



STANDARD DRAWING 102-B REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	WATER SERVICE CONNECTION FOR 1 1/2" - 2 METERS NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	

REQUIRED MANUFACTURE: D&L FOUNDRY				
MODEL NUMBER: B-5021				
CAST IRON CONFORMS TO ASTM A48 CL35B				
MATCHES MANUFACTRE'S DRAWINGS DATE: 05/17/13				
OWNERSHIP, PATENTS AND DESIGN BY THE FORD COMPANY APPLY				

ITEM	DESCRIPTION	QTY	MATERIAL	CATALOG NUMBER (ADD "-NL" FOR NO-LEAD)
1	ANGLE DUAL CART CHK VL	1	CAST RED OR NO-LEAD BRASS	HHCA13-444-SN-REV
2	BALL VALVE	1	CAST RED OR NO-LEAD BRASS	B81-444W
3	1 1/8" OD COPPER tUBE	1	COPPER	
4	BAR	1	CAST RED OR NO-LEAD BRASS	
5	ANGLE BALL VALVE	1	CAST RED OR NO-LEAD BRASS	BA13-444W-SN
6	SOLDER BUSHING	2	CAST RED OR NO-LEAD BRASS	CS8-44
7	TIE BAR	1	CAST RED BASS	CST-3
8	FLOW DIRECTION ARROW LABEL	2		DAL
9	1 1/8" OD COPPER TUBE	1	COPPER	



STANDARD DRAWING
102-C
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

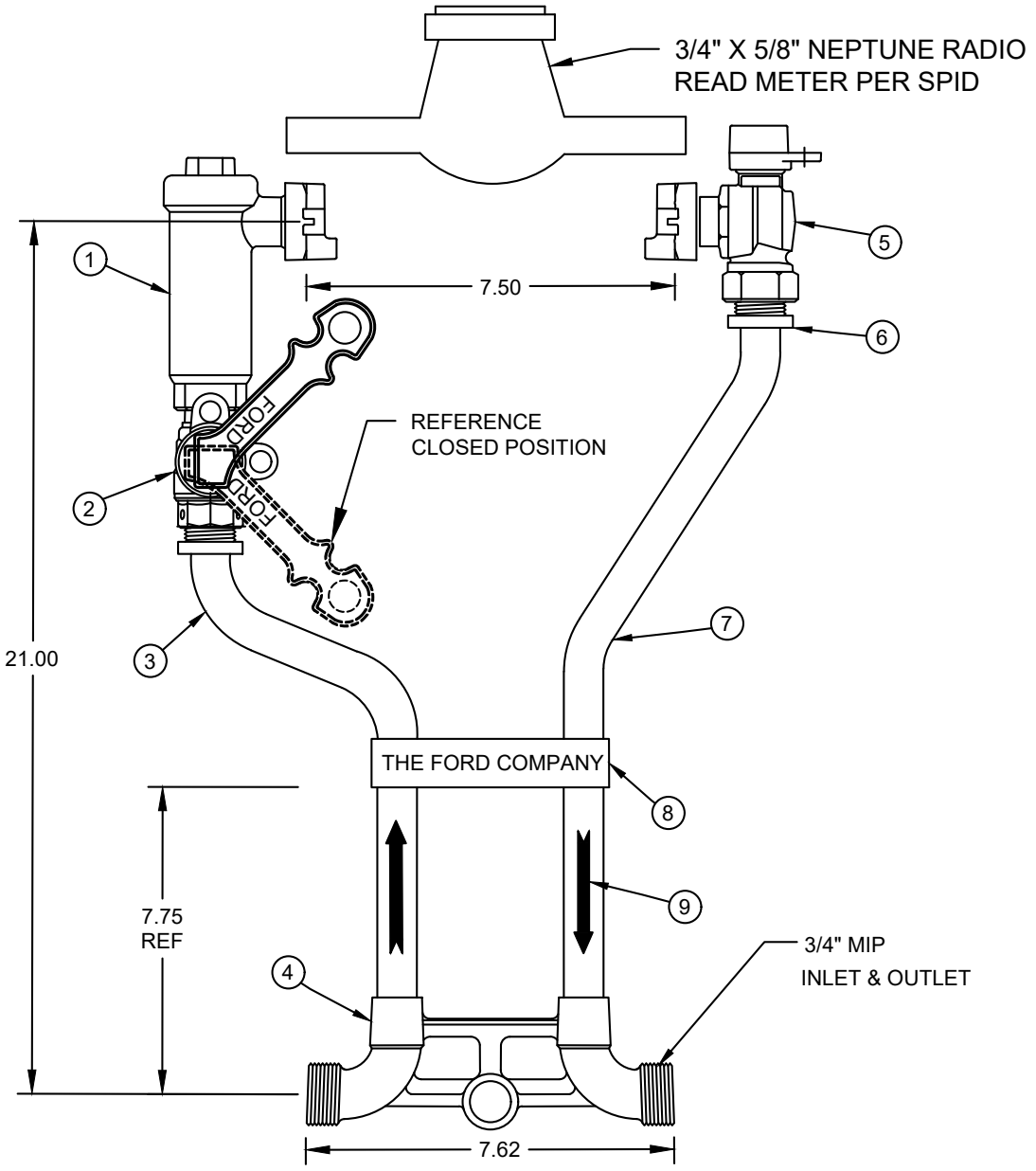
CAST IRON METER BOX LID FOR 3/4" - 1" METERS

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

REQUIRED MANUFACTURE: THE FORD METER BOX CO, INC.	
WABASH, INDIANA 46992 USA	
CATALOG NUMBERS: VBHC72-C15836-002-NL (NO-LEAD ALLOY IS REQUIRED)	
ASSEMBLY: 5/8" x 3/4" COPPERSETTER, BV W/ HANDLE CHECK VALVE ON INLET RISER, 3/4" MIP OUTLET, W/TIE BAR, 7/8" OD COPPER, 21 HGT	
MATCHES MANUFACTRE'S DRAWINGS DATE: 01/30/2019	
OWNERSHIP, PATENTS AND DESIGN BY THE FORD COMPANY APPLY	

ITEM	DESCRIPTION	QTY	MATERIAL	CATALOG NUMBER (ADD "-NL" FOR NO-LEAD)
1	ANGLE DUAL CART CHK VL	1	CAST RED OR NO-LEAD BRASS	HHCA13-332-SN-REV-NL
2	BALL VALVE	1	CAST RED OR NO-LEAD BRASS	B81-233W-C15836-002-NL
3	7/8" OD COPPER tUBE	1	COPPER	
4	BAR	1	CAST RED OR NO-LEAD BRASS	
5	ANGLE BALL VALVE	1	CAST RED OR NO-LEAD BRASS	BA13-232-SN-NL
6	SOLDER BUSHING	2	CAST RED OR NO-LEAD BRASS	CS8-33-875-NL
7	7/8" OD COPPER tUBE	1	COPPER	
8	TIE BAR	1	CAST RED BRASS	
9	FLOW DIRECTION ARROW LABLE	2		



STANDARD DRAWING
103-A
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

3/4" COPPER METER SETTER

NOT TO SCALE

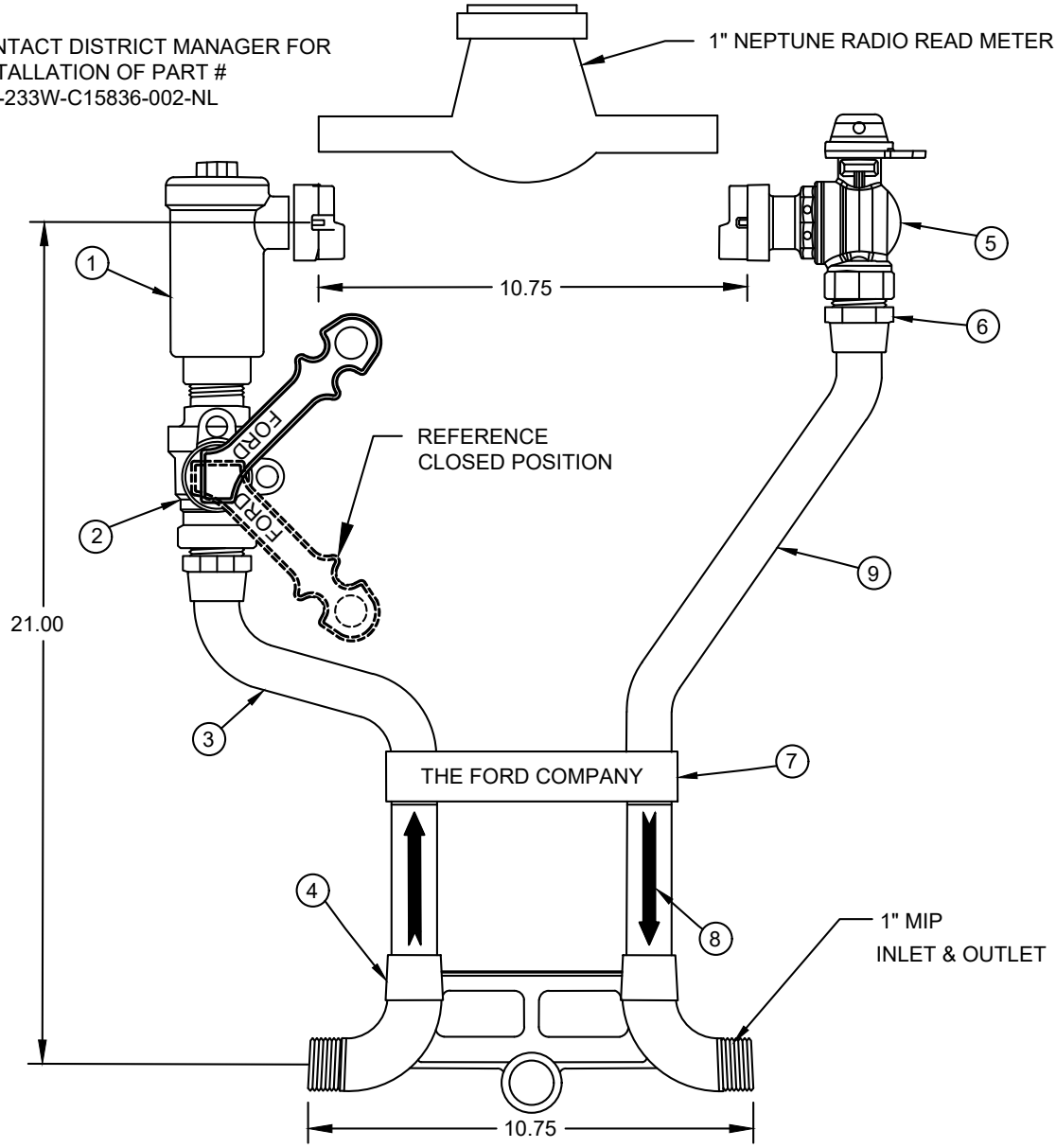
STANSBURY PARK IMPROVEMENT DISTRICT

REQUIRED MANUFACTURE: THE FORD METER BOX CO, INC.
WABASH, INDIANA 46992 USA
CATALOG NUMBERS: VBHC74-95581-03-NL (NO-LEAD ALLOY IS REQUIRED)
ASSEMBLY: 1" COPPERSETTER, BALL VALVE & CHECK VALVE ON INLET RISER, 1" MIP INLET & OUTLET, W/TIE BAR
MATCHES MANUFACTRE'S DRAWINGS DATE: 10/15/2013
OWNERSHIP, PATENTS AND DESIGN BY THE FORD COMPANY APPLY

ITEM	DESCRIPTION	QTY	MATERIAL	CATALOG NUMBER (ADD "-NL" FOR NO-LEAD)
1	ANGLE DUAL CART CHK VL	1	CAST RED OR NO-LEAD BRASS	HHCA13-444-SN-REV
2	BALL VALVE	1	CAST RED OR NO-LEAD BRASS	B81-233W-C15836-002-NL
3	1 1/8" OD COPPER tUBE	1	COPPER	
4	BAR	1	CAST RED OR NO-LEAD BRASS	
5	ANGLE BALL VALVE	1	CAST RED OR NO-LEAD BRASS	BA13-444W-SN
6	SOLDER BUSHING	2	CAST RED OR NO-LEAD BRASS	CS8-44
7	TIE BAR	1	CAST RED BASS	CST-3
8	FLOW DIRECTION ARROW LABEL	2		DAL
9	1 1/8" OD COPPER TUBE	1	COPPER	

SEE NOTE 1 FOR THIS PART

NOTE:
1. CONTACT DISTRICT MANAGER FOR INSTALLATION OF PART # B81-233W-C15836-002-NL



STANDARD DRAWING
103-B
REV.: 05-14-2026

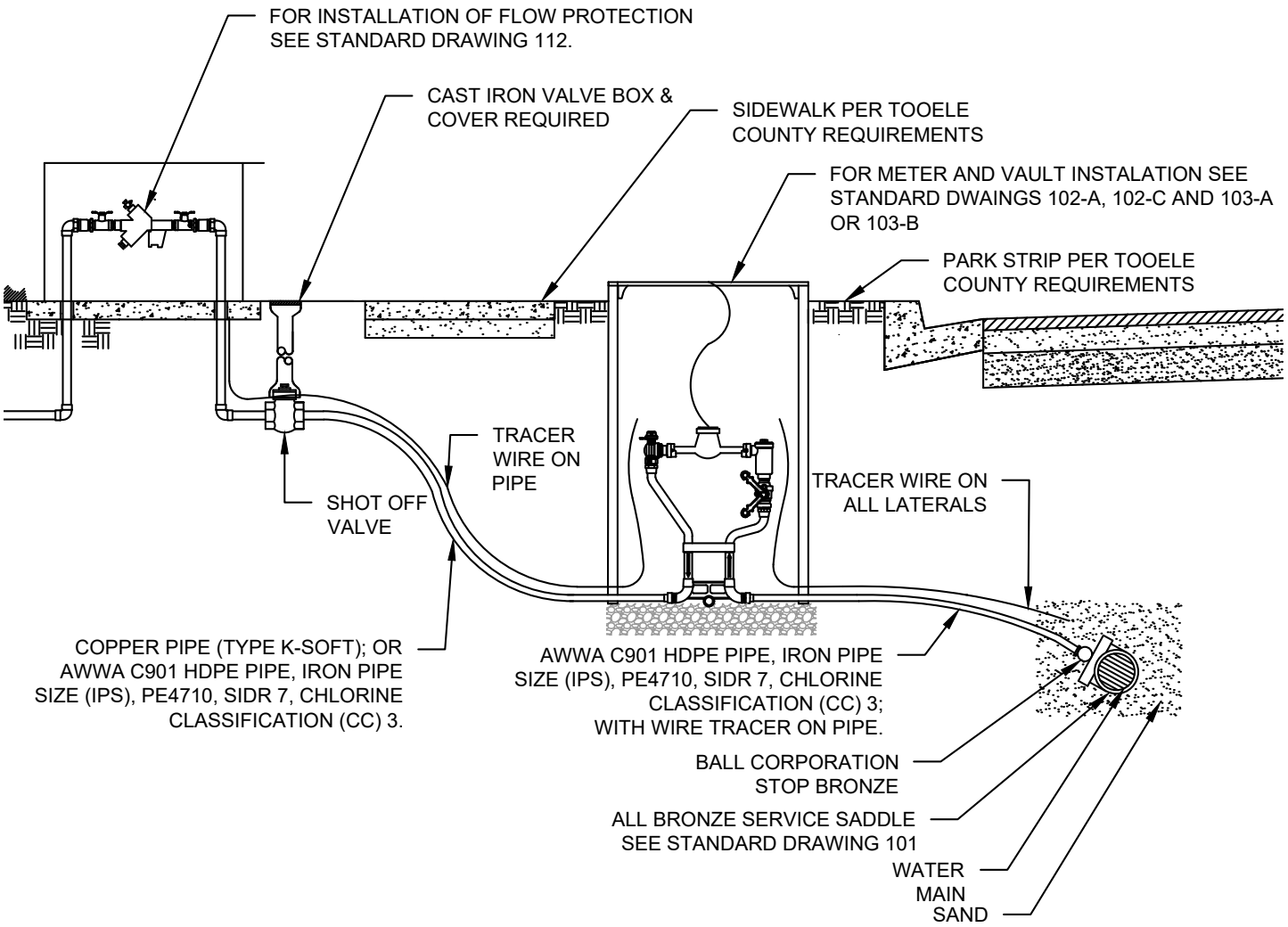
Brendan Thorpe P.E.
District Engineer

1" COPPER METER SETTER

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

NOTE:
CONTACT STANSBURY PARK SERVICE AGENCY
FOR ADDITIONAL LOCAL BACKFLOW ASSEMBLY
AND ENCLOSURE REQUIREMENTS (435-882-6188)



STANDARD DRAWING
104-A
REV.: 05-14-2026

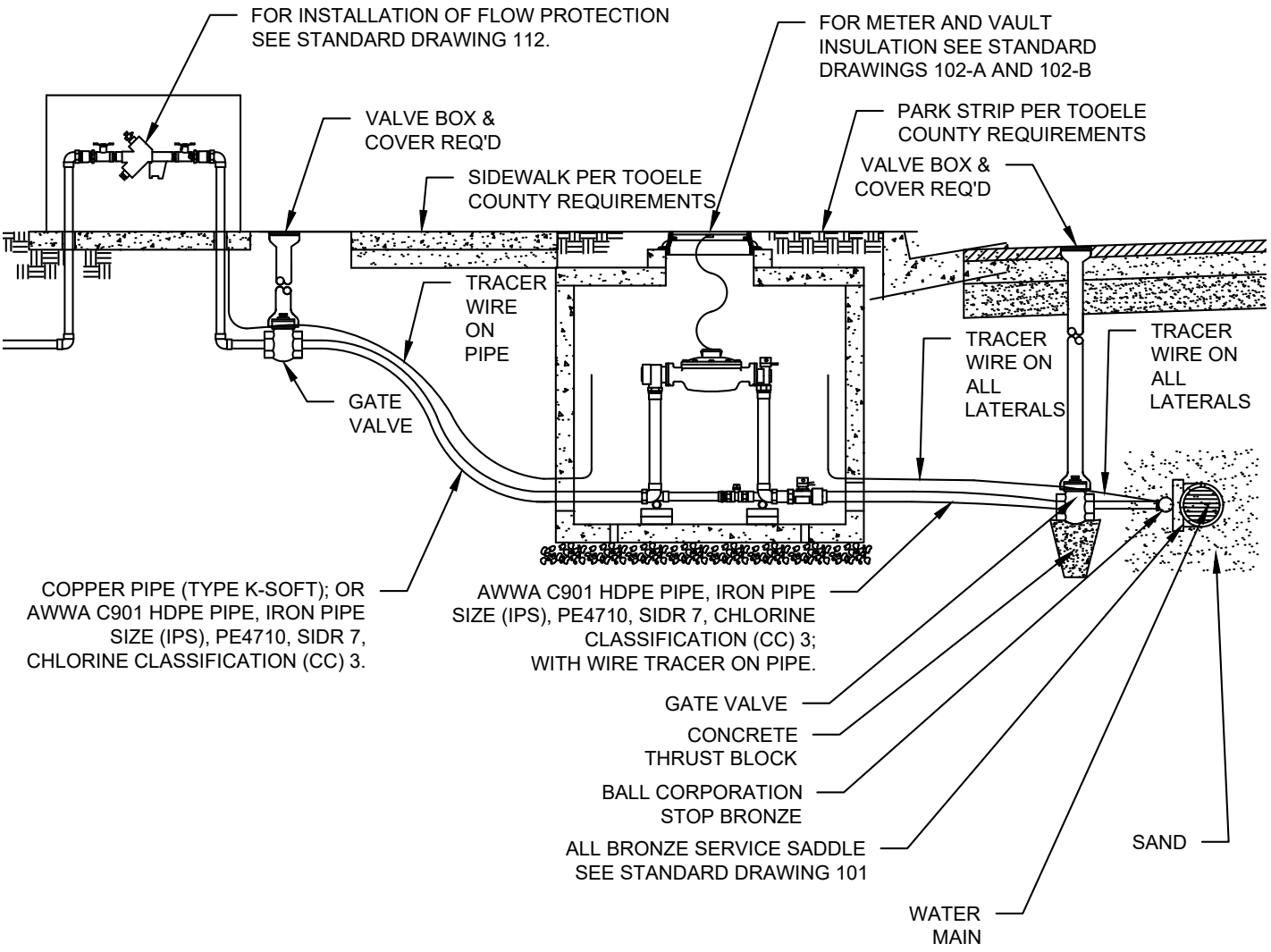
Brendan Thorpe P.E.
District Engineer

3/4" - 1" IRRIGATION SERVICE CONNECTION WITH REDUCED PRESSURE PRINCIPLE ASSEMBLY

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

NOTE:
FOR SYSTEMS THAT WILL BE TURNED OVER TO THE STANSBURY PARK SERVICE AGENCY, PLEASE CONTACT THEM FOR ADDITIONAL LOCAL BACKFLOW ASSEMBLY AND ENCLOSURE REQUIREMENTS (435-882-6188)



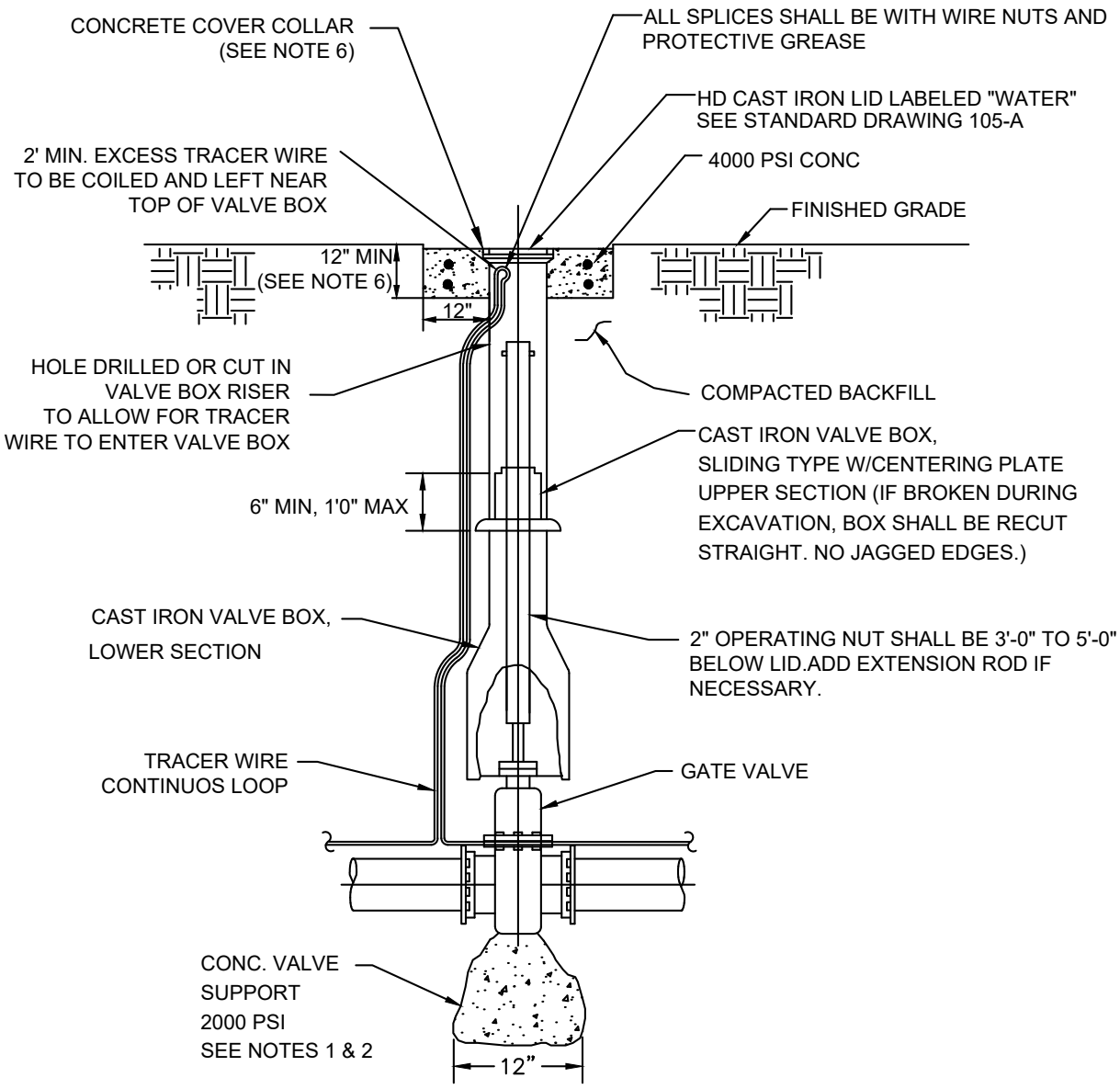
STANDARD DRAWING
104-B
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

2" IRRIGATION SERVICE CONNECTION WITH REDUCED PRESSURE PRINCIPLE ASSEMBLY

NOT TO SCALE

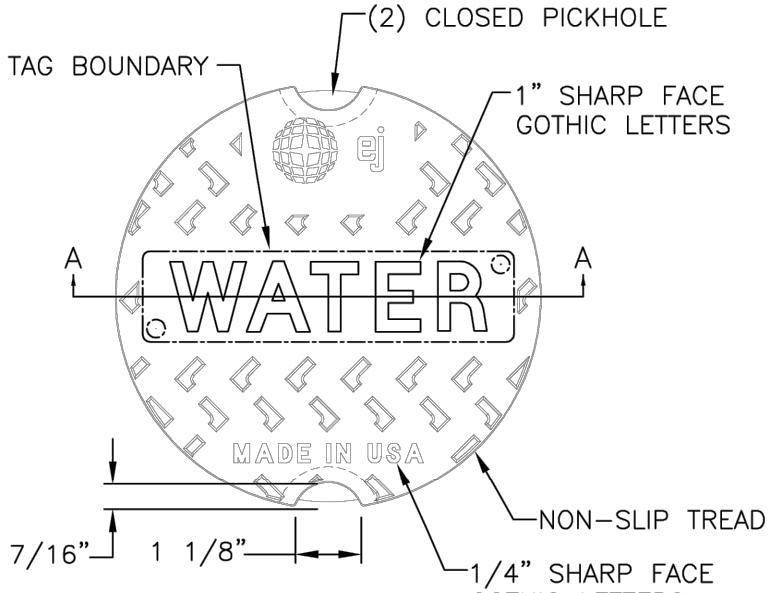
STANSBURY PARK IMPROVEMENT DISTRICT



NOTES:

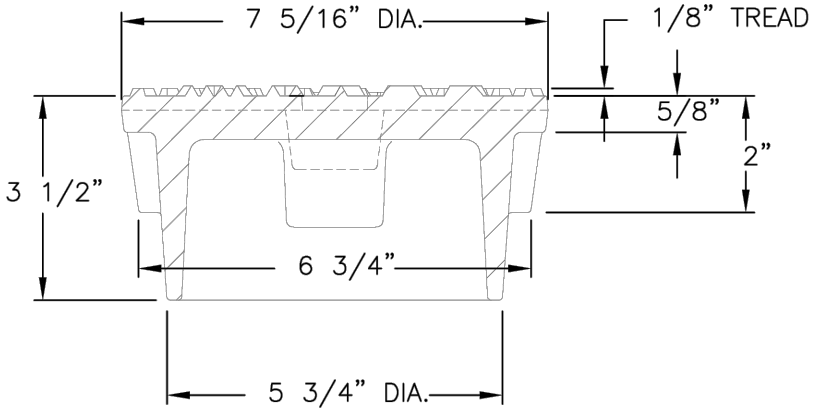
1. GATE VALVES SHALL BE UTILIZED ON 6", 8", AND 10" VALVES. BUTTERFLY VALVES ARE REQUIRED FOR VALVES BIGGER THAN 10".
2. PROVIDE CONCRETE VALVE SUPPORT FOR PVC PIPE ONLY.
3. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. COAT ALL BOLTS BELOW GROUND W/POLY FM GREASE & WRAP W/8 MIL POLYETHYLENE.
5. GATE VALVES SHALL COMPLY TO AWWA C509 OR AWWA C515 AND BE RESILIENT SEAT GATE VALVES.
6. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES
7. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.
8. CONCRETE COLLARS SHALL HAVE AN IDENTIFYING MARK SHOWING THE DIRECTION OF FLOW OR THE PIPE ORIENTATION FOR WATER LINES. MARK ALL LINE SIZES EXCEPT FOR 8"

STANDARD DRAWING 105 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	BURIED GATE VALVE NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



PLAN VIEW

BOTTOM VIEW

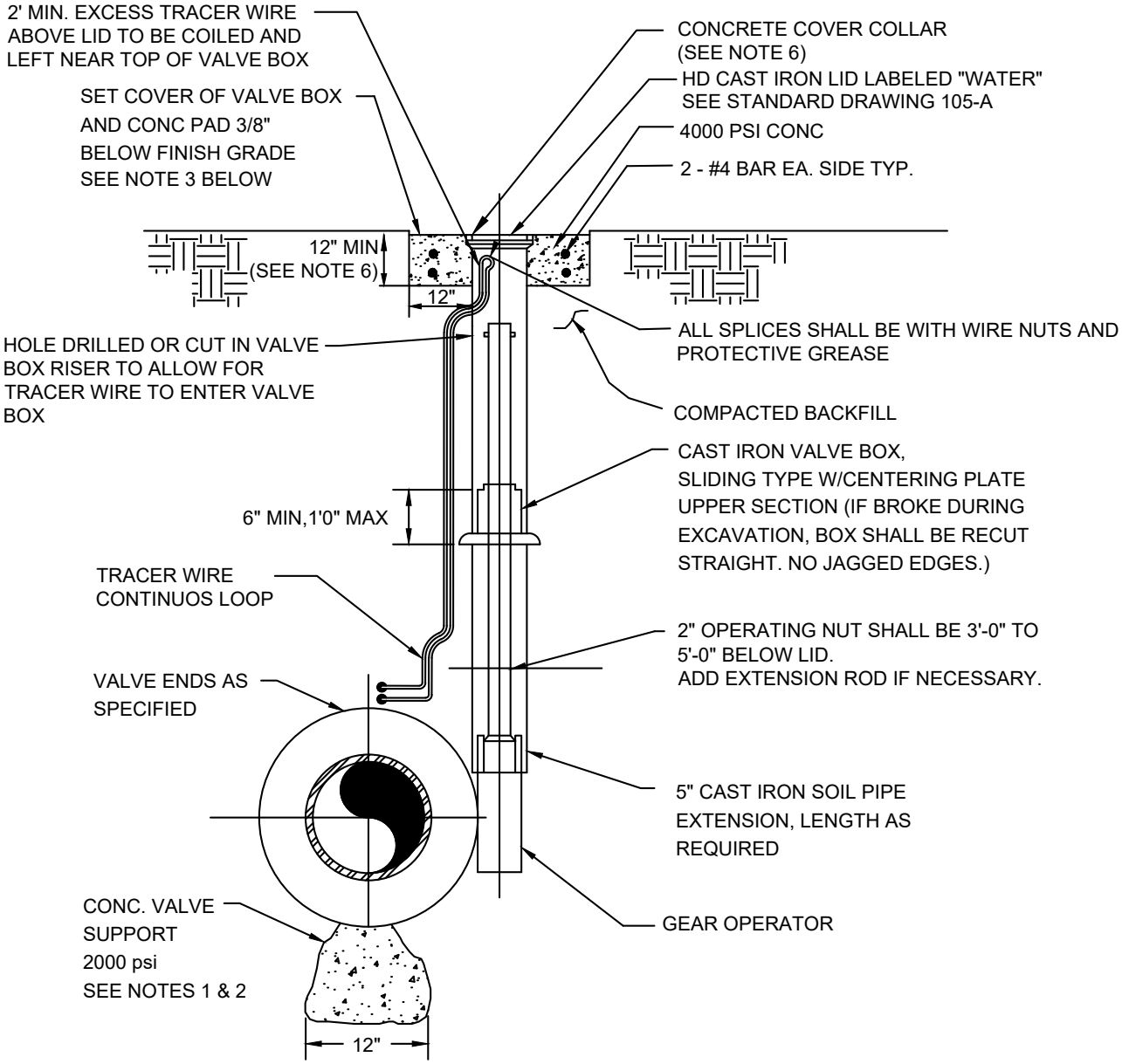


SECTION VIEW

6800 VALVE BOX COVER
BY ej

NOTES:
1. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.

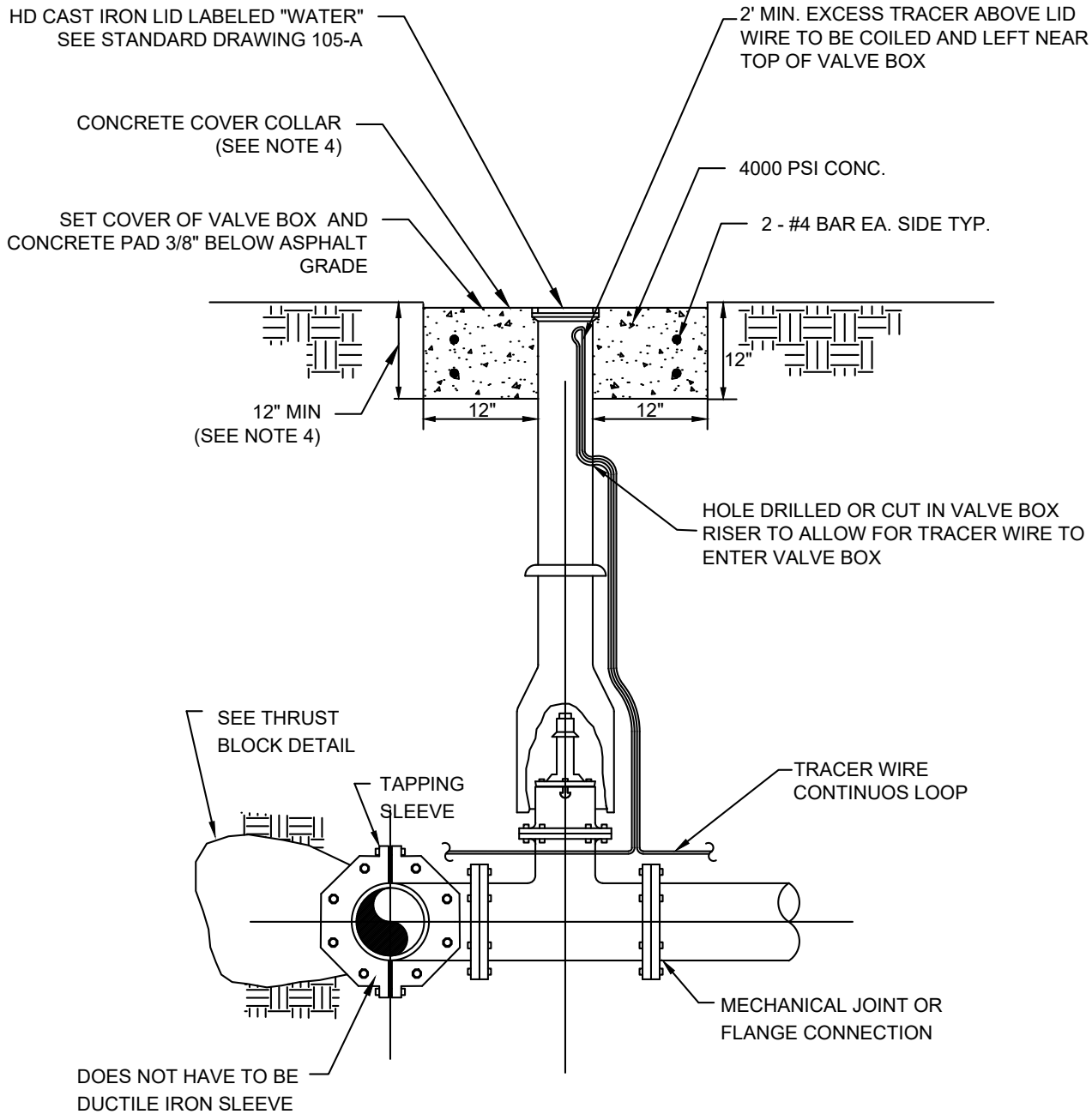
STANDARD DRAWING 105-A REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	VALVE BOX COVER NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



NOTES:

1. BUTTERFLY VALVES SHALL BE UTILIZED ON 12" AND LARGER WATER MAINS.
2. PROVIDE CONCRETE VALVE SUPPORT FOR PVC PIPE ONLY.
3. CONCRETE SHALL BE PLACED ACCORDING TO APWA MANUAL OF STANDARDS AND SPECIFICATIONS.
4. COAT ALL BOLTS BELOW GROUND W/POLY FM GREASE & WRAP W/8 MIL POLYETHYLENE.
5. ALL BUTTERFLY VALVES FOR STANDARD PRESSURE APPLICATIONS SHALL BE TIGHT-CLOSING RUBBER SEAR BUTTERFLY VALVES SHALL MEET THE REQUIREMENTS OF AWWA C-504 FOR CLASS 150 B VALVES AND BE RATED FOR A WORKING PRESSURE OF 150 PSI. HIGH PRESSURE BUTTERFLY VALVES SHALL BE RATED FOR WORKING PRESSURE AS SPECIFIED IN THE PROJECT'S DRAWINGS.
6. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES
7. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.
8. CONCRETE COLLARS SHALL HAVE AN IDENTIFYING MARK SHOWING THE DIRECTION OF FLOW OR THE PIPE ORIENTATION FOR WATER LINES. MARK ALL LINE SIZES EXCEPT FOR 8"

STANDARD DRAWING 106 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	BURIED BUTTERFLY VALVE NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



FOR DIP OR CIP

NOTES:

1. ALL BURIED BOLTS SHALL BE COATED WITH CHEVRON POLY FM GREASE.
2. ALL BURIED IRON SHALL BE WRAPPED WITH ONE LAYER OF 10 ML POLYETHYLENE SHEETING TAPED IN PLACE. SEE SPECIFICATIONS.
3. ALL TAPPING SLEEVES MUST BE 24" MIN. FROM THE NEAREST JOINT OR SERVICE.
4. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES
5. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.

STANDARD DRAWING
108
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

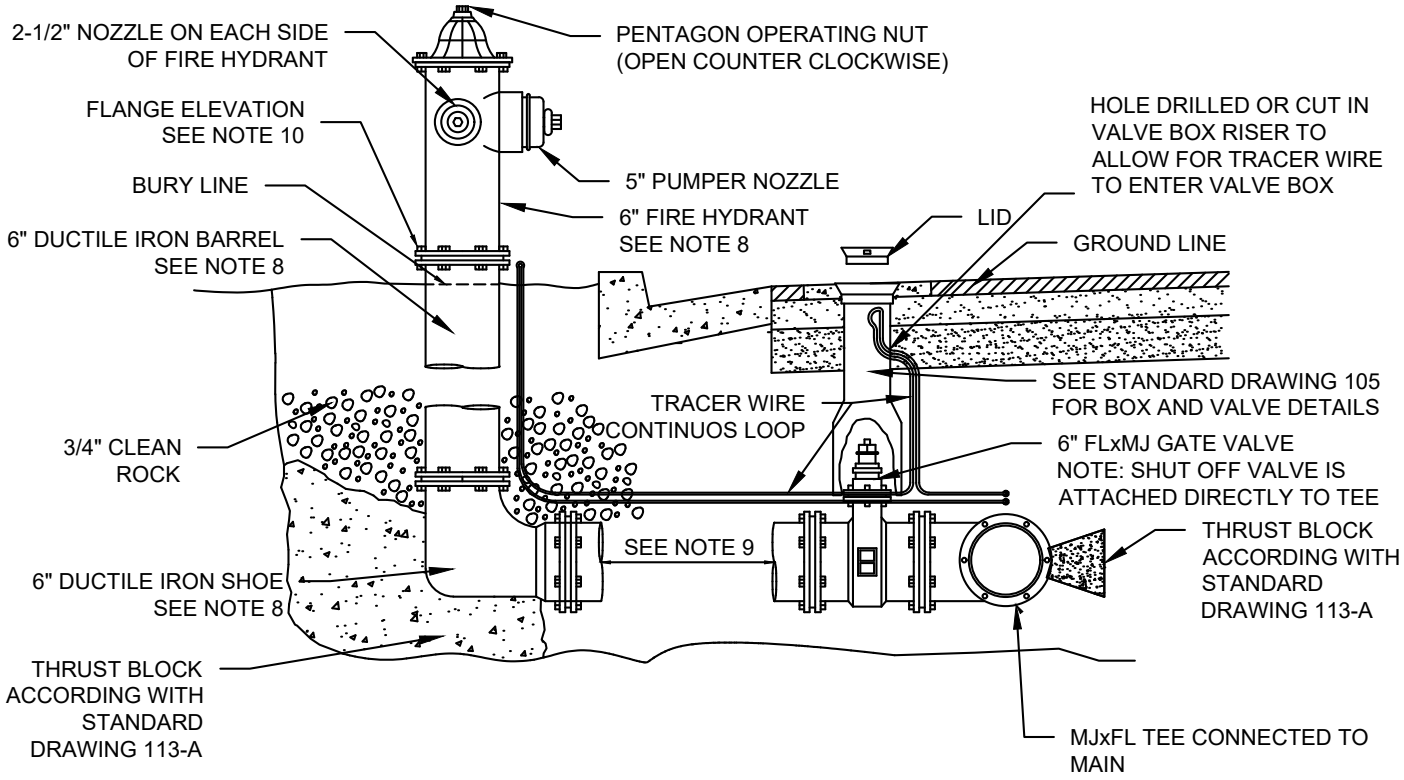
TAPPING SLEEVE & GATE VALVE

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

NOTES:

1. ALL WORK WILL BE INSPECTED BY IMPROVEMENT DISTRICT PERSONNEL OR ENGINEER.
2. THRUST BLOCKS REQUIRED WITH A MINIMUM OF 4 SQUARE FEET OF BEARING ON UNDISTURBED SOIL.
3. DRAIN HOLES AT BASE OF HYDRANT TO REMAIN CLEAR WITH A MINIMUM OF 1 CU. YD. CLEAN 3/4" ROCK PLACED AROUND THE HOLE TO FACILITATE DRAINAGE.
4. THE PUMPER NOZZLE SHALL FACE THE STREET OR CENTER OF CUL-DE-SAC.
5. ALL FITTINGS AND BARREL WILL BE GREASED WITH POLYURA FM GREASE AND WRAPPED. (IN 10 MIL POLYVINYL)
6. FINISH GRADE OF SURROUNDING SURFACE ELEVATION SHALL NOT EXTEND ABOVE THE BURY LINE ON THE HYDRANT BARRELL.
7. LOCATE HYDRANT GATE VALVE AND VALVE BOX IN THE STREET.
8. CLOW, MEDALLION HYDRANT (PARTS & SSEMBLY) OR APPROVED EQUIVALENT, REQUIRED TO BE RED IN COLOR.
9. IF THE DISTANCE BETWEEN THE VALVE AT THE MAIN LINE AND HYDRANT ELBOW IS 20 FEET OR LESS, NO INTERMEDIATE JOINTS ARE ALLOWED. IF DISTANCE IS GREATER THAN 20 FEET, BELL & SPIGOT REQUIRE JOINT RESTRAINTS.
10. FLANGE SHALL BE CONSTRUCTED ABOVE BURY LINE AT A MAXIMUM ELEVATION NOT EXCEED 8" ABOVE TBC.



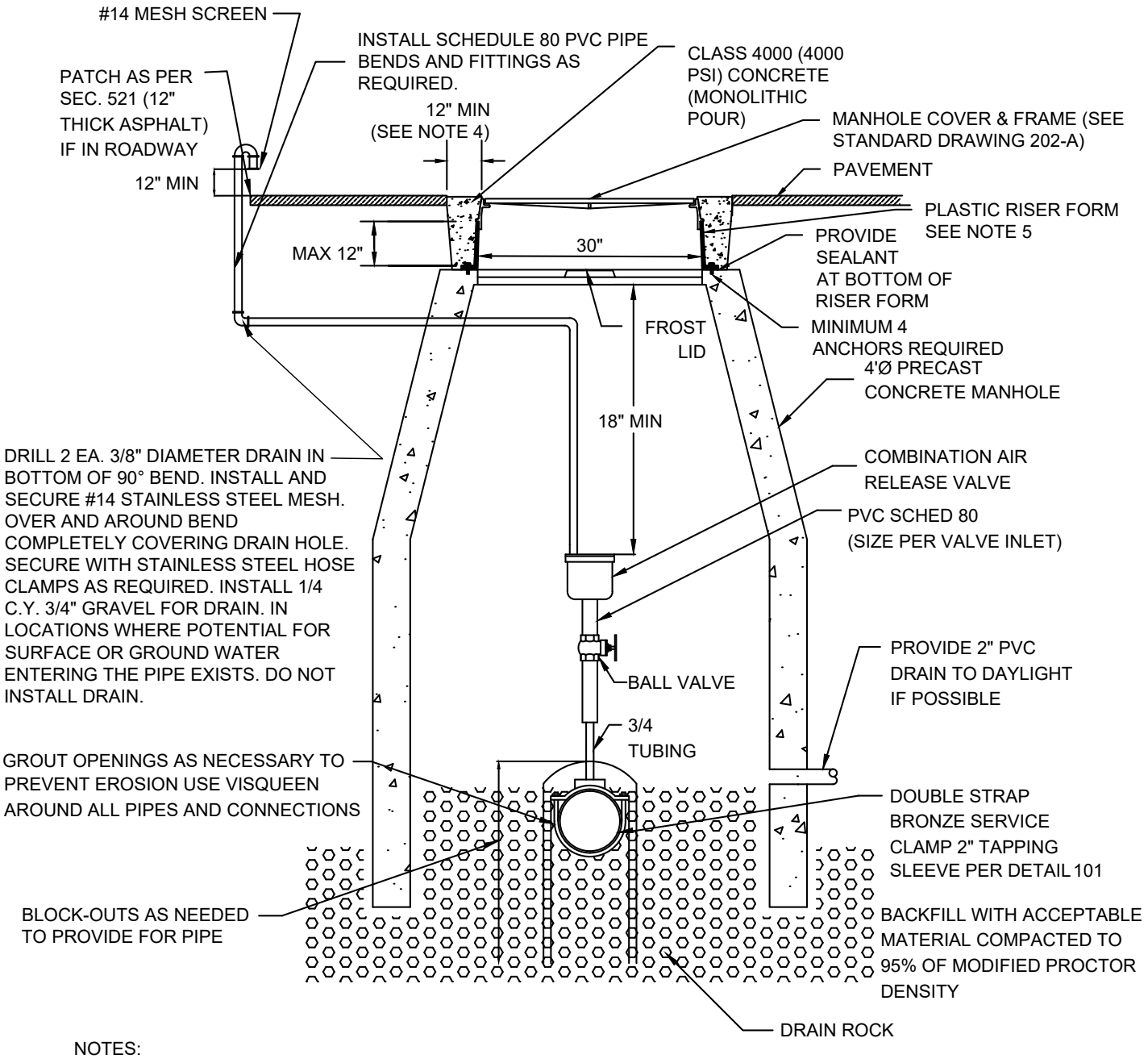
STANDARD DRAWING
109
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

FIRE HYDRANT

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



NOTES:

1. FOR INSTALLATION IN ROADWAYS ONLY (DRAIN MUST DAYLIGHT, NO EXCEPTION). SEE DETAIL 110-B FOR INSTALLATIONS IN NON-PAVED AREAS.
2. VAULT SHALL DRAIN TO EITHER DAYLIGHT(PREFERRED) OR HAVE A GRAVEL FILLED SUMP ACCORDING TO STATE OF UTAH DRINKING WATER SYSTEMS VENT PIPE FROM THE VALVE MUST BE EXTENDED ONE FOOT ABOVE BOTTOM.
3. TRACER WIRE REQUIRED. PROVIDE 2' MIN EXCESS TRACER WIRE ABOVE LID COILED AND LEFT SECURED NEAR TOP OF BOX.
4. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES
5. INSTALL WHIRLYGIG MANHOLE RISER COLLAR SYSTEM PER STANDARD DRAWING 202-A.
6. CONCRETE COLLARS SHALL HAVE AN IDENTIFYING MARK SHOWING THE DIRECTION OF FLOW OR THE PIPE ORIENTATION FOR WATER LINES. MARK ALL LINE SIZES EXCEPT FOR 8"

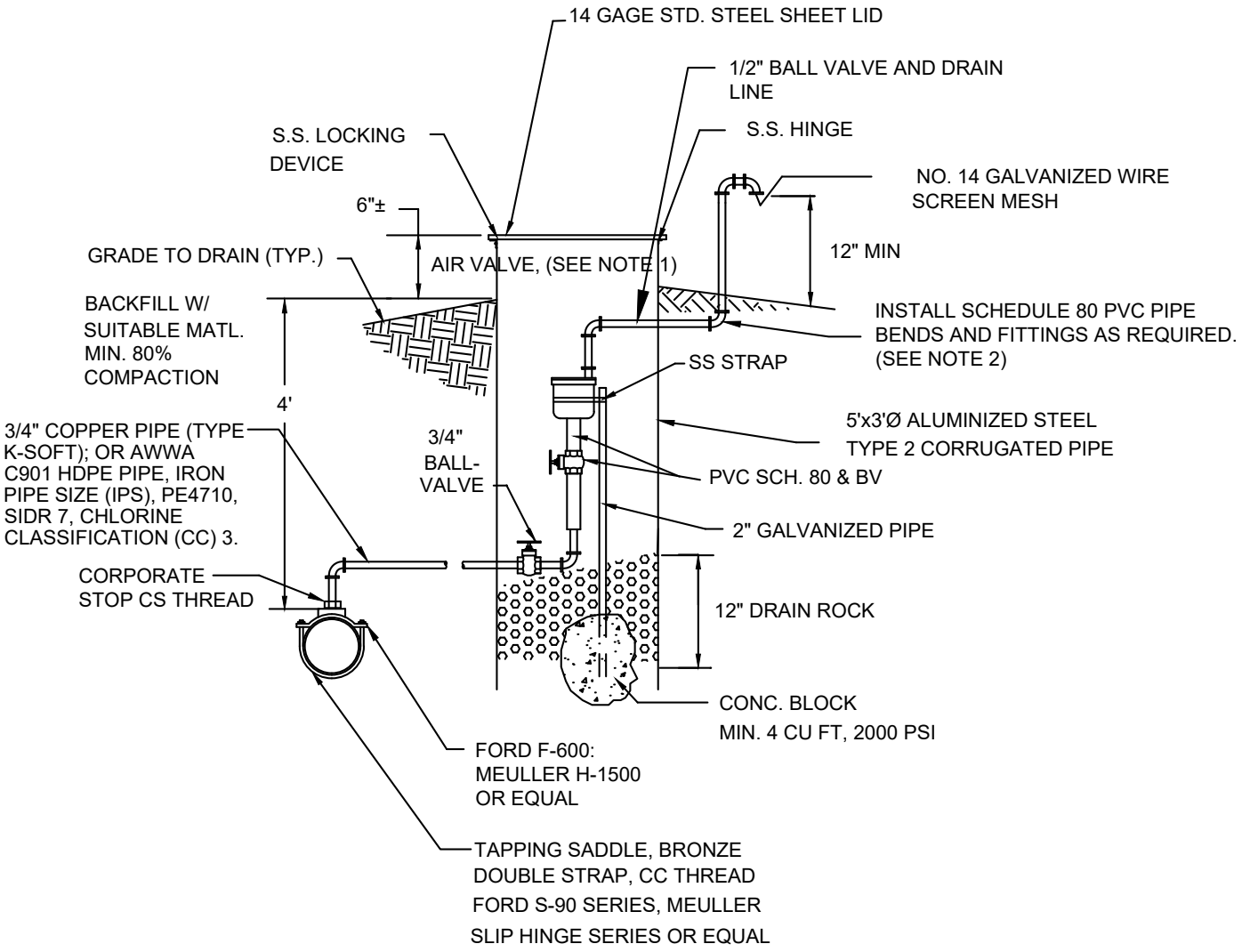
STANDARD DRAWING
110-A
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

AIR RELEASE/VACUUM VALVE

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



NOTES:

1. COMBINATION AIR VALVE, WHERE SHOWN ON PLANS, SHALL BE APCOMODEL 145C OR APPROVED EQUAL. AIR RELEASE VALVES, SHALL BE APCO MODEL 50 OR APPROVED EQUAL.
2. DRILL 2 EA. 3/8" DIAMETER DRAIN IN BOTTOM OF 90° BEND. INSTALL AND SECURE #14 STAINLESS STEEL MESH. OVER AND AROUND BEND COMPLETELY COVERING DRAIN HOLE. SECURE WITH STAINLESS STEEL HOSE CLAMPS AS REQUIRED. INSTALL 1/4 C.Y. 3/4" GRAVEL FOR DRAIN. IN LOCATIONS WHERE POTENTIAL FOR SURFACE OR GROUND WATER ENTERING THE PIPE EXISTS. DO NOT INSTALL DRAIN.
3. TRACER WIRE REQUIRED. PROVIDE 2' MIN EXCESS TRACER WIRE ABOVE LID COILED AND LEFT SECURED NEAR TOP OF BOX.

STANDARD DRAWING
110-B
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

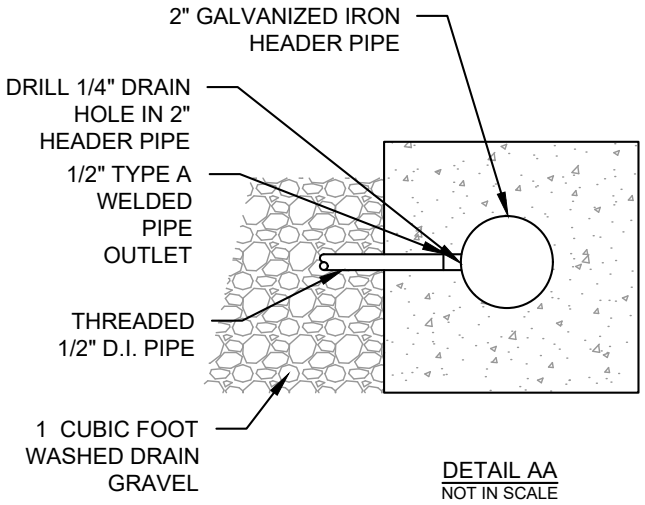
AIR RELEASE/VACUUM VALVE

NOT TO SCALE

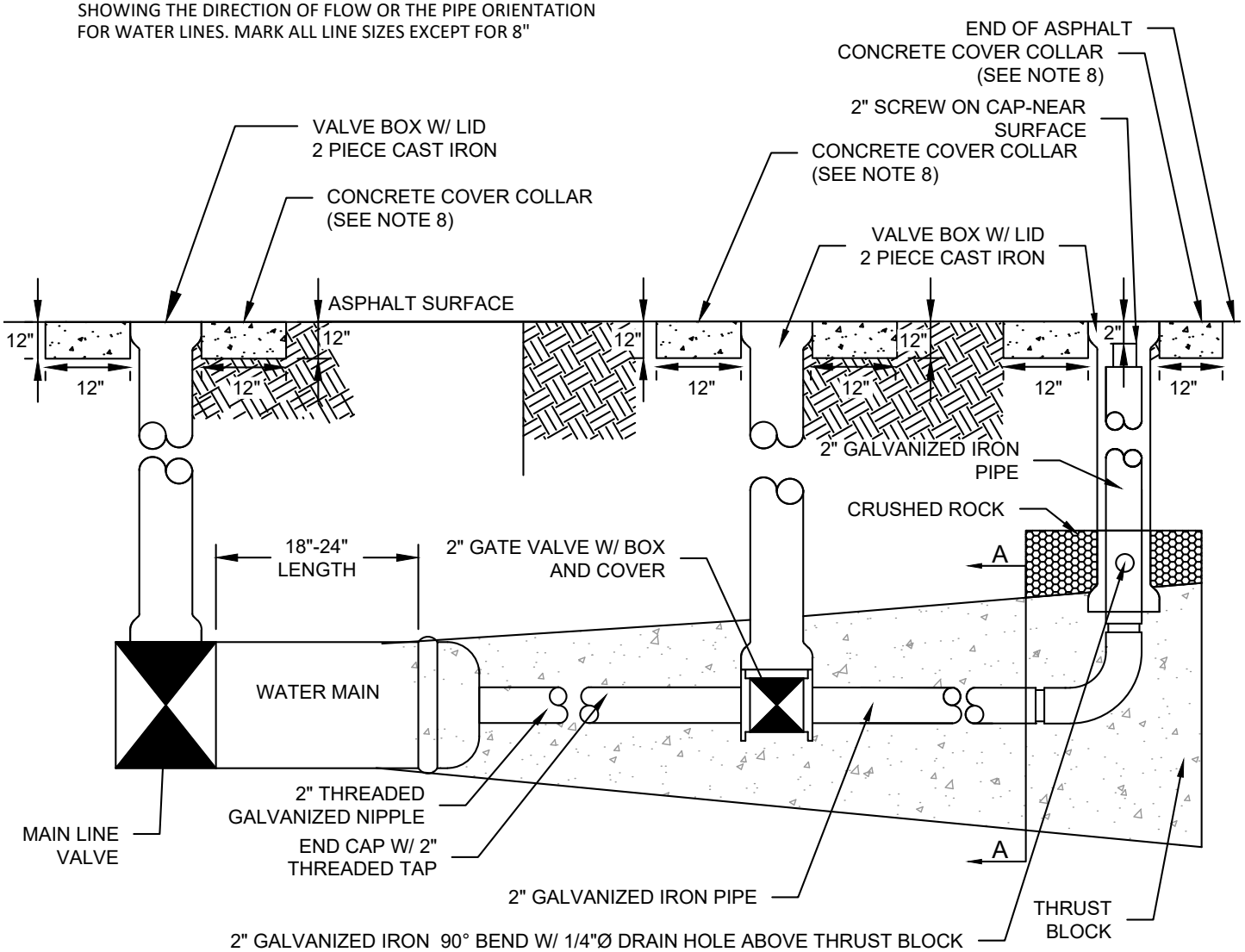
STANSBURY PARK IMPROVEMENT DISTRICT

NOTES:

1. CONCRETE: CLASS 2000 MINIMUM PER APWA SECTION 03 30 04. POUR CONCRETE AGAINST UNDISTURBED SOIL.
2. TAPE: APPLY TAPE WRAP TO THE EXTERIOR OF ALL GALVANIZED PIPE PER AWWA C209.
3. DRAINAGE: AFTER INSTALLATION OF WASHOUT VALVE ASSEMBLY, VERIFY THE WASHOUT VALVE RISER DRAINS TO GRAVEL.
4. INSPECTION: PRIOR TO BACKFILLING AROUND THRUST BLOCK, SECURE INSPECTION OF INSTALLATION BY ENGINEER.
5. BACKFILL: PROVIDE AND PLACE PER APWA SECTION 33 05 20. COMPACT PER APWA SECTION 31 23 26 TO A MODIFIED PROCTOR DENSITY OF 95 PERCENT OR GREATER.
6. ASSEMBLY SHALL BE CONSTRUCTED WITHIN ASPHALT PAVEMENT.
7. BLOW OFF ASSEMBLY SHALL BE PLACED WITHIN THE ASPHALT ROAD OR WITHIN AN ASPHALT APRON.
8. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES.
9. CONCRETE COLLARS SHALL HAVE AN IDENTIFYING MARK SHOWING THE DIRECTION OF FLOW OR THE PIPE ORIENTATION FOR WATER LINES. MARK ALL LINE SIZES EXCEPT FOR 8"



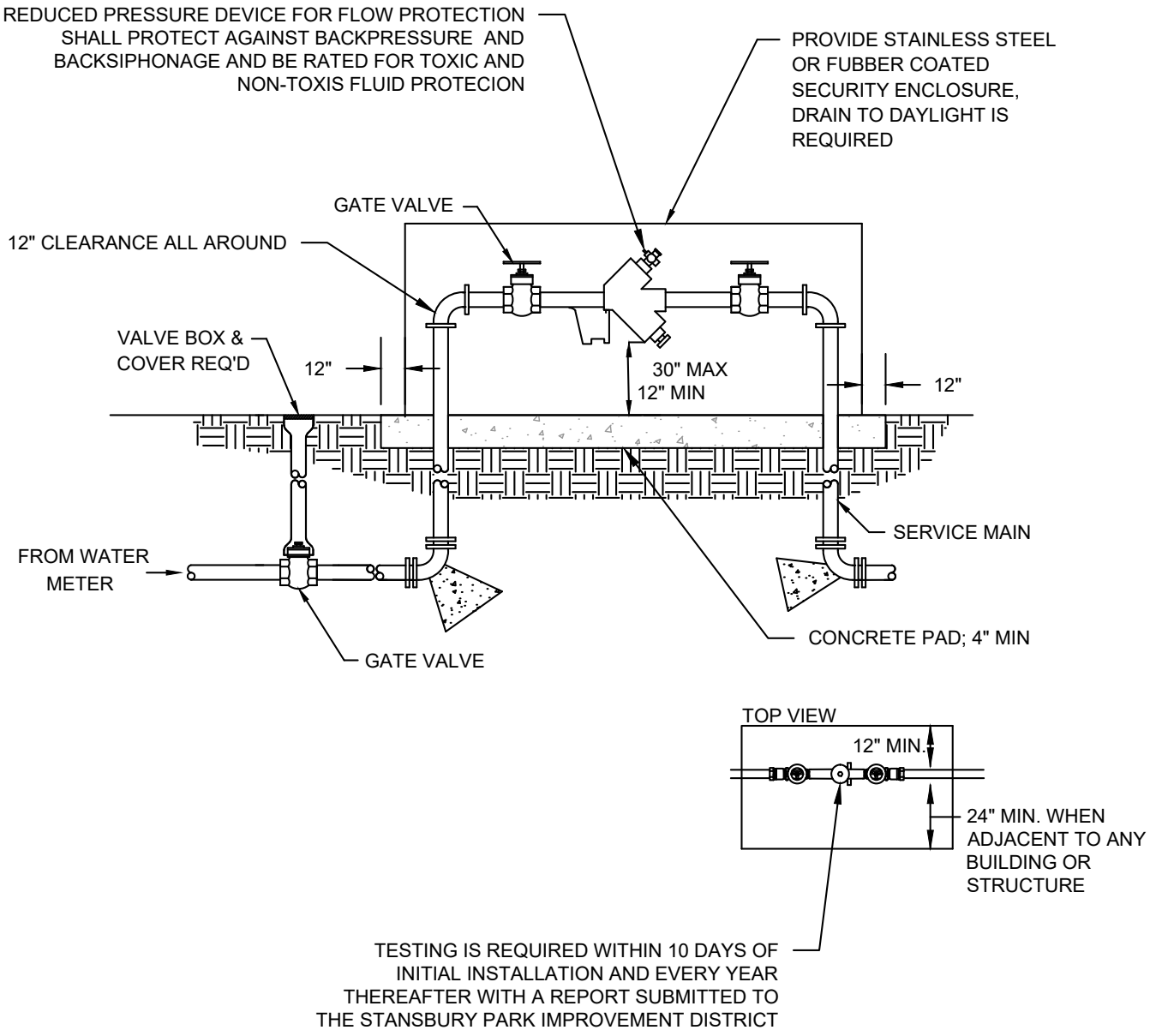
DETAIL AA
NOT IN SCALE



STANDARD DRAWING 111 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	WASHOUT DETAIL NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	

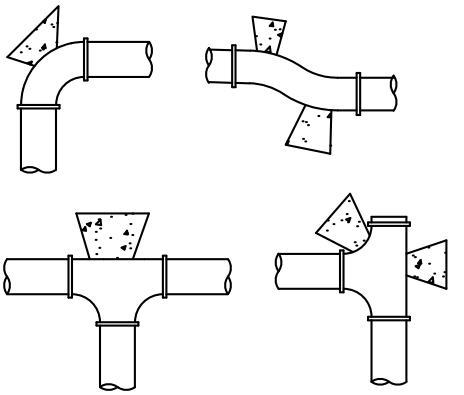
NOTE:

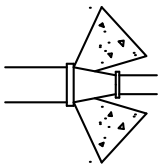
1. PIPE 3" AND LARGER TO BE FLANGED DIP CLASS 51.
2. PIPE 2" AND SMALLER TO BE THREADED I.P.
3. GALVANIZED AND COATED.
4. ALL BURIED PIPE AND FITTINGS SHALL BE GREASED AND WRAPED.
5. CANNOT BE INSTALLED IN THE BOTTOM OF A DETENTION POND OR WHERE ASSEMBLY MAY BECOME SUBMERGED IN WATER

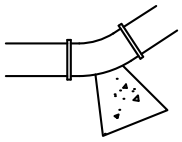


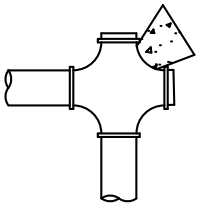
TESTING IS REQUIRED WITHIN 10 DAYS OF INITIAL INSTALLATION AND EVERY YEAR THEREAFTER WITH A REPORT SUBMITTED TO THE STANSBURY PARK IMPROVEMENT DISTRICT

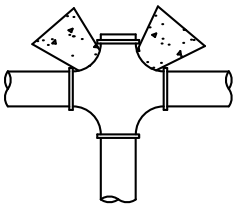
STANDARD DRAWING 112 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	BACKFLOW PREVENTER DETAIL NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	

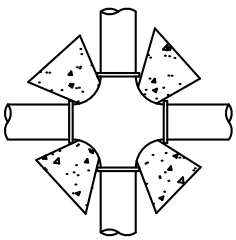












NOTES:

1. ALL WORK MUST BE INSPECTED BY AN ENGINEER PRIOR TO BACKFILL.
2. POUR THRUST BLOCKS AGAINST UNDISTURBED SOIL
3. ALL PIPE JOINTS MUST BE LEFT ACCESSIBLE.
4. CURE ALL CONCRETE FOR 5 DAYS PRIOR TO PRESSURIZING WATER LINES.
5. CONCRETE MUST HAVE A MINIMUM OF 2000 P.S.I. COMPRESSIVE STRENGTH IN 28 DAYS.
6. POUR THRUST TO THE CONFIGURATION SHOWN.
7. BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 200 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 LBS/SQ.FT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESS. USE THE FOLLOWING EQUATION: BEARING AREA=(TEST PRESS./200) *(2000/SOIL BEARING STRESS)*(TABLE VALUE).
8. BEARING AREAS, VOLUMES, AND SPECIAL BLOCK-ING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD.
9. BEARING AREAS FOR PIPE SIZES OR CONFIGURATIONS NOT SHOWN REQUIRE A SPECIAL DESIGN.

MINIMUM BEARING AREA IN sq.ft.					
SIZES OF PIPE	TEES,VAL. DEAD ENDS	90° BENDS	45° BENDS	22.5° BENDS	11.25° BENDS
4"	2	3	2	2	2
6"	4	5.5	3	2.5	2
8"	6.5	9.5	5	2.75	2.5
12"	14	20	11	5.5	3
14"	19	26.5	14.5	7.5	4
16"	24	34	18.5	9.5	6
20"	27	52	28.5	14.5	9
24"	53	74	41	21	12
30"	81	114	62	32	16

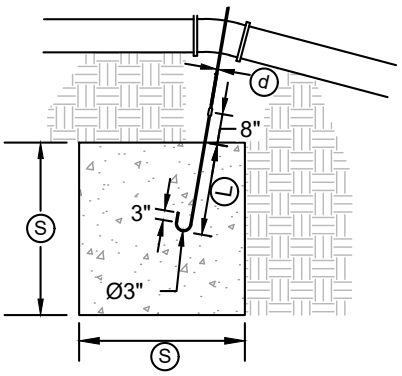
STANDARD DRAWING
113-A
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

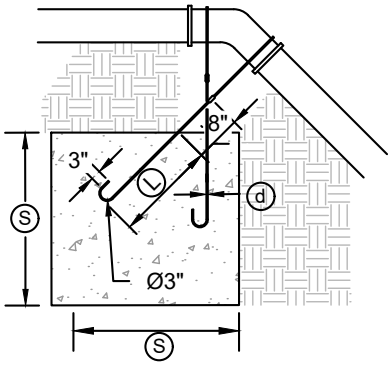
THRUST BLOCK DETAILS

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



TYPE A RESTRAINT
FOR 11 ¼" - 22 ½" VERTICAL BENDS



TYPE A RESTRAINT
FOR 11 ¼" - 22 ½" VERTICAL BENDS

NOTE: ALL REBAR, REBAR RODS AND SHANKS SHALL BE EXPOXY COATED

TABLE OF DIMENSIONS

PIPE SIZE NOMINAL DIAMETER - INCH	VERTICAL BEND IN DEGREES	CONCRETE BLOCKING IN CUBIC FEET	Ⓢ SIDE OF CUBE - FEET	ⓓ DIAMETER OF SHANK OR REBAR RODS - INCH	Ⓛ DEPTH OF ROD CONCRETE - FEET
4"	11 1/4"	8	2.0	5/8"	1.5
	22 1/2"	15.6	2.5	5/8"	2.0
6"	11 1/4"	15.6	2.5	5/8"	2.0
	22 1/2"	34.3	3.25	5/8"	2.0
8"	11 1/4"	27	3.0	5/8"	2.0
	22 1/2"	64	4.0	5/8"	2.0
12"	11 1/4"	64	4.0	5/8"	2.0
	22 1/2"	125	5.0	3/4"	3.0
16"	11 1/4"	107	4.25	7/8"	3.0
	22 1/2"	216	6.0	7/8"	3.0
20"	11 1/4"	138	5.17	1"	3.5
	22 1/2"	334	6.94	1"	4.0
24"	11 1/4"	240	6.22	1"	4.0
	22 1/2"	476	7.81	1"	4.0
30"	11 1/4"	733	7.17	1"	4.0
	22 1/2"	733	9.02	1"	4.0

TABLE OF DIMENSIONS

PIPE SIZE NOMINAL DIAMETER - INCH	VERTICAL BEND IN DEGREES	CONCRETE BLOCKING IN CUBIC FEET	Ⓢ SIDE OF CUBE - FEET	ⓓ DIAMETER OF SHANK OR REBAR RODS - INCH	Ⓛ DEPTH OF ROD CONCRETE - FEET
4"	45	27	3.0	5/8"	2.0
				5/8"	
6"		64	4.0	5/8"	2.5
				5/8"	
8"		107.17	4.75	5/8"	3.0
				5/8"	
12"		244.14	6.25	5/8"	4.0
				5/8"	
16"		465.5	7.75	3/4"	4.0
				3/4"	
20"		716.04	8.95	3/4"	4.0
				3/4"	
24"		1021.15	10.07	3/4"	4.0
				3/4"	
30"		1655.6	11.83	3/4"	4.0
				3/4"	

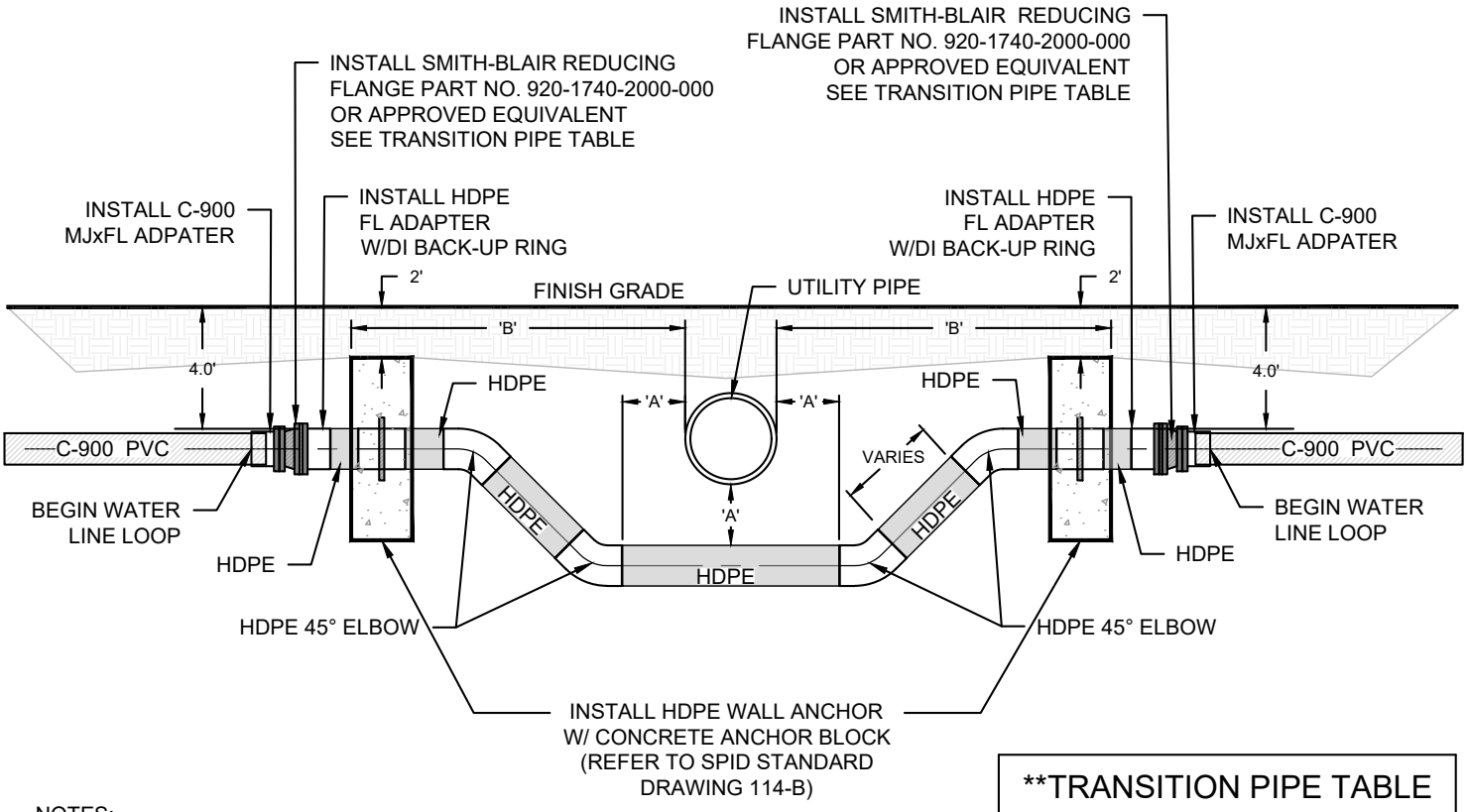
STANDARD DRAWING
113-B
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

THRUST BLOCK DETAILS

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



NOTES:

1. HDPE SPOOL PIPE LENGTHS AS REQUIRED. CONTRACTOR SHALL INSTALL ALL PIPE AND APPURTENANCES TO THE DIMENSIONS DESIGNED AND SHOWN IN THE PLAN & PROFILE SHEETS, BY THE DESIGN ENGINEER, WHICH IS REQUIRED BY THE DISTRICT MANAGER.
2. HDPE PIPE SHALL HAVE AN INNER DIAMETER (ID) THAT MATCHES THE ID OF THE CONNECTING MAIN WATERLINE, REGARDLESS OF PIPE MATERIAL.
3. THE CONTRACTOR SHALL CONTACT THE DISTRICT 24-hrs BEFORE COMMENCING WORK ON THE WATER-LINE LOOP AND THE DISTRICT MUST BE PRESENT PRIOR TO COMMENCING WORK.
4. FUSED HDPE PIPES ARE SELF RESTRAINED. NO THRUST BLOCKS OR RESTRAINT HARNESSES ARE REQUIRED, EXCEPT WHERE THE PIPE ATTACHES TO A NON-HDPE PIPE.
5. ENTIRE WATER LINE LOOP, ABOVE THE PIPE ZONE, SHALL BE BACKFILLED WITH GRANULAR BACKFILL BARROW (APWA SECTION 31.05.13) AND COMPACTED TO 95% MODIFIED PROCTOR COMPACTION EFFORT PER ASTM D-1557 (APWA SECTION 31.25.00). INSTALL PIPE BEDDING MATERIAL PER SPID STANDARD DRAWING 401-A2.
6. ALL HDPE PIPE SHALL BE FUSED BY A QUALIFIED AND CERTIFIED CONTRACTOR (ASTM F3190) AND INDEPENDENTLY INSPECTED BY A QUALIFIED AND CERTIFIED INSPECTOR PROVIDED BY THE CONTRACTOR.

**TRANSITION PIPE TABLE	
C900 PVC DR-18	HDPE DIPS DR-11
PIPE SIZE	Pipe Size
8"	10"
10"	12"
12"	14"
14"	16"
16"	18"
18"	20"
20"	24"
22"	30"
30"	36"

** UPSIZE THE HDPE PIPES WHEN TRANSITIONING FROM C900 TO HDPE
** UP-SIZING HDPE PIPE PER THE TABLE IS REQUIRED TO MAINTAIN THE I.D. PIPE CAPACITY OF THE PRIMARY C-900 PIPE
** HDPE PIPE ID IS (DIPS) DUCTILE IRON PIPE SIZE, DR-11
** FOR HDPE (IPS) IRON PIPE SIZES , SEE MANUFACTURERS SPECIFICATIONS

PIPE CLEARANCES		
DIMENSION	* CLEARANCE BETWEEN SANITARY SEWER PIPE & WATER PIPE	CLEARANCE BETWEEN ALL OTHER UTILITY PIPES AND WATER PIPE
'A'	1.5'	0.5'
'B'	10'	N/A

* NOT PERMITTED WITHOUT AN EXCEPTION GRANTED BY THE UTAH DIVISION OF DRINKING WATER R309-5550-7(1)(d)

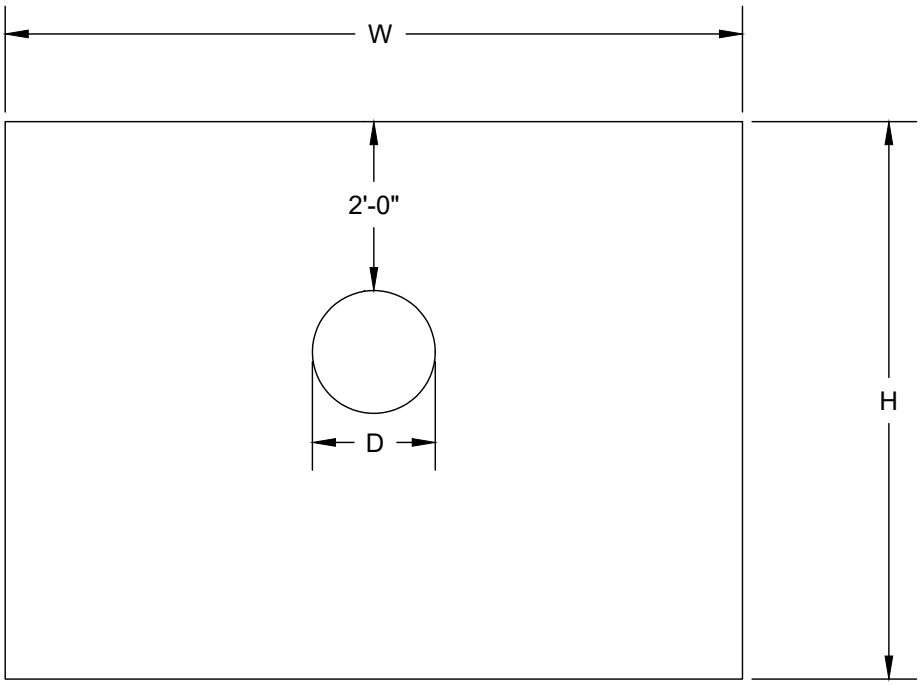
STANDARD DRAWING
114-A
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

STANDARD WATERLINE LOOP

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



CONCRETE ANCHOR SCHEDULE			
PIPE D	H	W	THICK
6	2'-6"	2'-6"	32"
8	2'-6"	3'-0"	32"
10	3'-0"	3'-6"	32"
12	3'-6"	3'-6"	32"
14	4'-0"	4'-0"	36"
16	4'-0"	5'-3"	36"
18	4'-6"	6'-6"	36"
20	5'-0"	6'-6"	36"
20	5'-0"	7'-0"	36"
24	5'-0"	7'-8"	36"
26	5'-0"	8'-0"	48"
28	6'-0"	8'-6"	48"
30	6'-0"	9'-6"	48"
32	6'-0"	10'-8"	48"

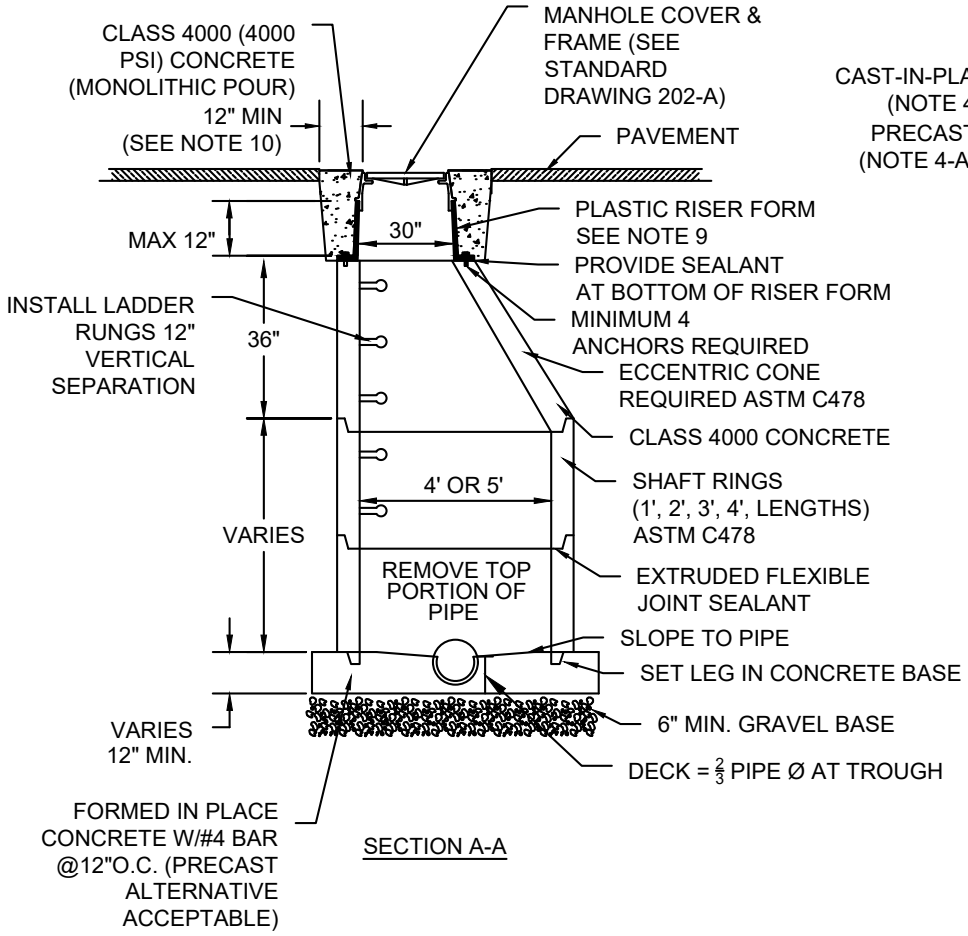
STANDARD DRAWING
114-B
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

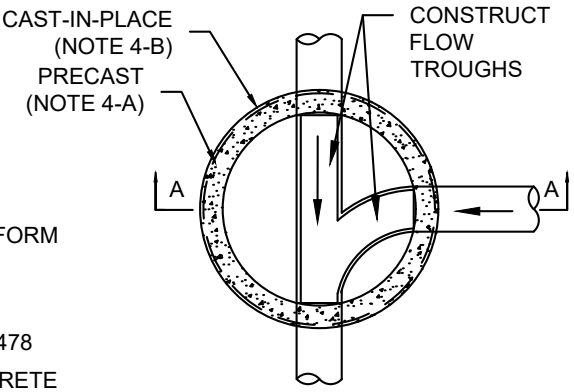
CONCRETE ANCHOR DETAIL FOR HDPE WALL ANCHOR FITTING

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



SECTION A-A



PLAN VIEW

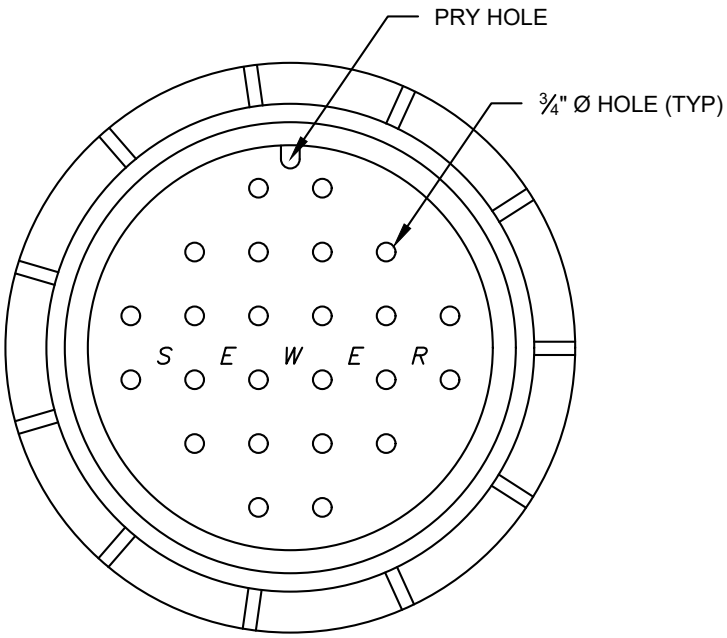
NOTES:

1. SEWERS UNDER 15" BUILD A 4' MANHOLE. SEWERS 15"Ø AND LARGER, BUILD 5'Ø MANHOLE. THREE WAY MANHOLES REGARDLESS OF SEWER SIZE SHALL BE 5'Ø.
2. GROUT ALL PIPE OPENINGS WITH 2:1 SAND TO CEMENT MORTAR.
3. PLACE FLEXIBLE GASKET-TYPE SEALANT IN ALL MANHOLE JOINTS.
4. ALTERNATES FOR UPPER SECTION OF MANHOLE:
   - 4.1. PRECAST REINFORCED CONCRETE WALLS 4-$\frac{3}{4}$" THICK MINIMUM.
   - 4.2. CAST-IN-PLACE CONCRETE, 8" MIN. WALL THICKNESS.
5. INVERT COVERS SHALL BE PLACED OVER THE TOP OF PIPE IN ALL MANHOLES DURING CONSTRUCTION. 5/8" EXTERIOR PLYWOOD SHALL BE USED.
6. INSTALL RUBBER WATERSTOP ON ALL PLASTIC PIPE WHEN CONNECTING TO MANHOLES. WATERSTOP SHALL BE HELD IN PLACE WITH A STAINLESS STEEL BAND.
7. ALL EXTERIOR SURFACES, INCLUDING BARREL, CONE, AND CHIMNEY SECTIONS SHALL HAVE AN ASPHALT-BASED COATING (OR DISTRICT APPROVED "WATER PROOFING" EQUIVALENT), AND PERFORMED FLEXIBLE JOINT SEALANT (MASTIC) MEETING REQUIREMENTS OF ASTM C990, AND SHALL BE POLY-WRAPPED AND COMPOSITE BENTONITE CLAY OR EXPANDABLE RUBBER BASED WATERSTOP DESIGNED TO CREATE WATER TIGHT JOINTS.
8. PIPE TO MANHOLE CONNECTIONS - USE A FLEXIBLE PIPE CONNECTOR(BOOT) CONFORMING TO ASTM C923, MANUFACTURED AND SIZED SPECIFICALLY FOR THE TYPE AND SIZE OF PIPE CONNECTING TO THE MANHOLE.
9. INSTALL WHIRLYGIG MANHOLE RISER COLLAR SYSTEM PER STANDARD DRAWING 202-A.
10. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES.
11. ANY BARREL, CONE, CHIMNEY, OR OTHER COMPONENT THAT DAMAGED UPON DELIVERY, STORAGE OR INSTALLATION SHALL BE REJECTED AND REPLACED. PROVIDE SMOOTH AND NEAT FINISHES ON INTERIOR OF CONES, SHAFTS AND RINGS. IMPERFECT MOLDINGS OR HONEYCOMBS ARE NOT ACCEPTED.
12. REINFORCEMENT: DEFORMED 60 KSI YIELD GRADE STEEL, ASTM A615.
13. DROP MANHOLES NOT PERMITTED. SPECIAL EXCEPTIONS REQUIRE APPROVED SHOP DRAWINGS.
14. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.

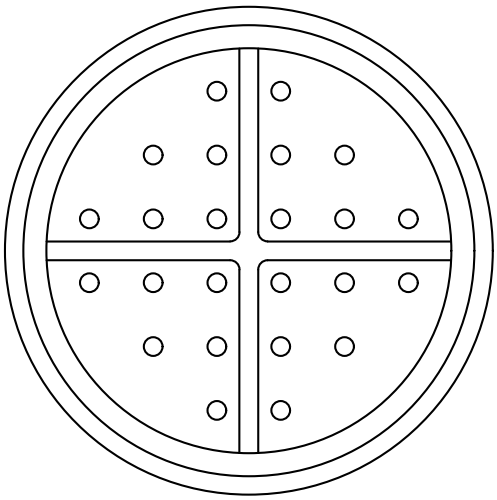
STANDARD DRAWING 201 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	SANITARY SEWER MANHOLE NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	

15. ALL SEWER BASE CONSTRUCTION SHALL HAVE A MINIMUM OF 0.20 FEET DROP FROM INFLOW INVERTS TO OUTFLOW INVERTS UNLESS OTHERWISE SPECIFICALLY APPROVED PRIOR TO CONSTRUCTION BY THE DISTRICT MANAGER. IF ANY VARIANCE TO THE FORGOING STANDARD IS APPROVED BY THE DISTRICT MANAGER ON A CASE-BY-CASE BASIS, THE MINIMUM DROP FROM INFLOW INVERTS TO OUTFLOW INVERTS SHALL BE NO LESS THAN 0.10 FEET, AND ALSO SHALL INCORPORATE THE FOLLOWING SPECIFIED BASE LINER. BASE LINER: PRECAST BASE SECTIONS LINERS SHALL BE A FIBERGLASS REINFORCED POLYMER (FRP) OR POLYPROPYLENE (PP) LINER. THE BASE LINER SHALL BE UTILIZED FOR PIPE CONNECTIONS AND SHALL PROVIDE (1) FULL-FLOW CHANNELS WITH SIDE WALLS EXTENDING TO THE CROWN OF THE PIPE; AND (2) GASKETED, FLEXIBLE, WATERTIGHT BELL TYPE CONNECTIONS TO SUIT THE PIPE TYPE(S), SIZE(S), AND GRADE ALIGNMENT(S) SHOWN ON THE DISTRICT-APPROVED CONSTRUCTION PLANS. BASE LINERS SHALL BE MANUFACTURED BY GENEVA PIPE AND PRECAST, A NORTHWEST PIPE COMPANY (SALT LAKE CITY, UT). PRECAST BASE SECTIONS SHALL HAVE CORROSION RESISTANCE CONFORMING TO THE REQUIREMENTS SPECIFIED IN SPID'S STANDARD DRAWINGS.

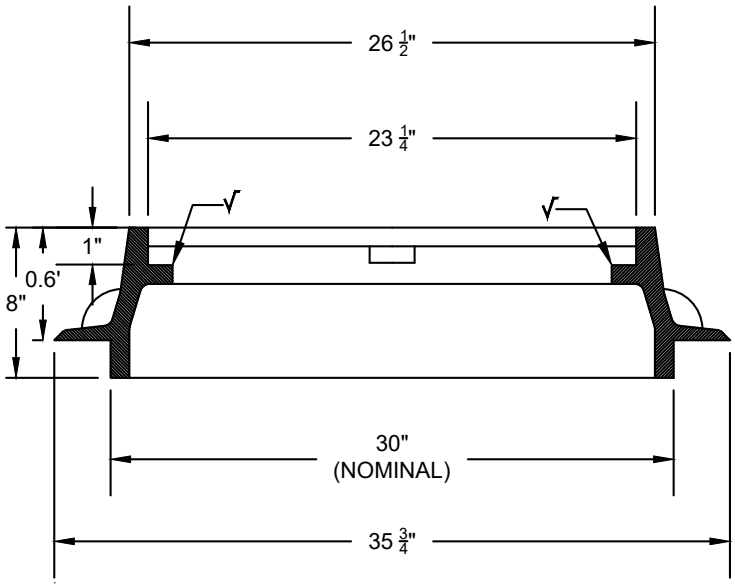
STANDARD DRAWING 201-A REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	SANITARY SEWER MANHOLE NOTES CONTINUED NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	

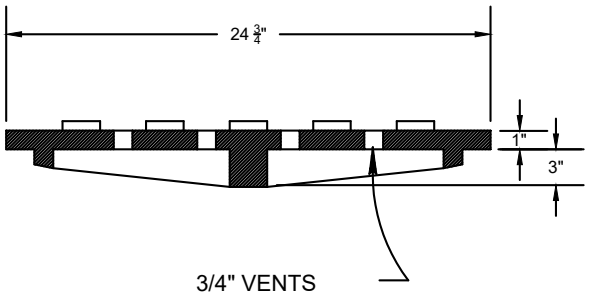


PLAN OF COVER & FRAME
NO SCALE
(SEE NOTE 6)



BOTTOM VIEW OF COVER
NO SCALE
(SEE NOTE 7)





3/4" VENTS
(12 PLACES)
(SEE NOTE 7)

NOTES:
1. CASTING: GRAY IRON CLASS 35 MINIMUM, ASTM A48, COATED WITH ASPHALT BASED PAINT OR BETTER (EXCEPTED ON MACHINED SURFACES)
2. CAST THE HEAT NUMBER ON THE FRAME AND COVER
3. GIVE THE FRAME AND COVER A MACHINE FINISH SO THE COVER WILL NOT ROCK.
4. DESIGNATES MACHINED SURFACES.
5. CAST THE WORD "SEWER" ON THE COVER IN UPPER CASE FLUSH WITH THE SURFACE FINISH.
6. FLAT OR CLEATED LID ACCEPTABLE.
7. MEET TRAFFIC HB 20 RATING MIN.
8. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.

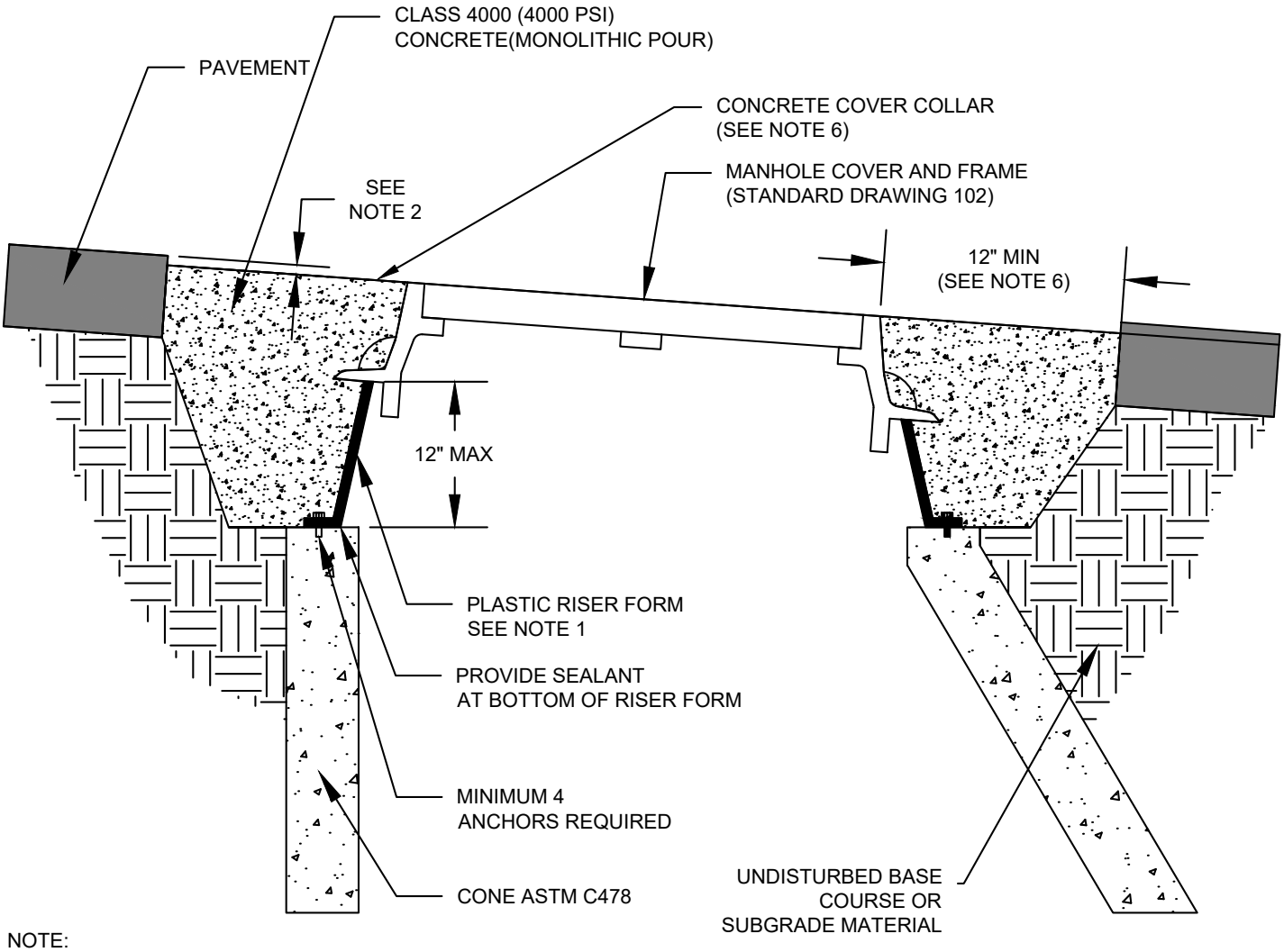
STANDARD DRAWING
202
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

MANHOLE FRAME AND COVER

NOT TO SCALE

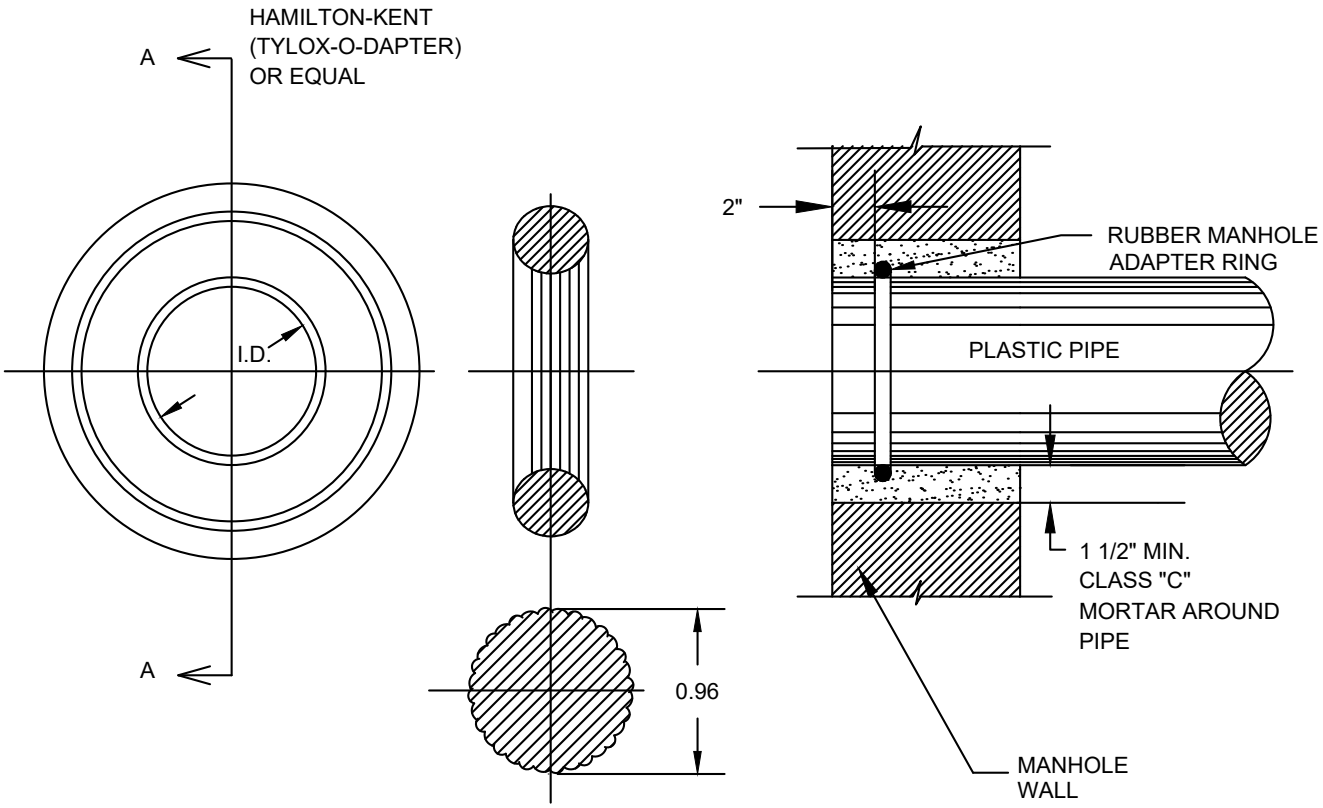
STANSBURY PARK IMPROVEMENT DISTRICT



NOTE:

1. INSTALL PLASTIC RISER MANUFACTURED BY WHIRLYGIG, OR APPROVED EQUIVALENT DESIGNED TO SUPPORT H-20 LIVE LOADS. CONCRETE GRADE RINGS ARE NOT PERMITTED.
2. MANHOLE ADJUSTMENT SHALL OCCUR AFTER FINAL PAVEMENT PLACEMENT IS COMPLETED. PROVIDE 3/8" RECESSED COLLAR WHEN ADJUSTING GRADES IN ASPHALT. PROVIDE 1/4" RECESSED COLLAR WHEN ADJUSTING GRADES IN CONCRETE.
3. DIMENSIONS OF PLASTIC RISER FORM SHALL BE SPECIFIC TO THE DIAMETERS OF THE MANHOLE FRAME AND CONE AND OF THE ADJUSTMENT HEIGHT.
4. ADJUST AND TRIM PLASTIC FORM HEIGHT SO THAT THE TOP OF MANHOLE FRAME AND COVER MATCHES LONGITUDINAL SLOPE AND CROSS SLOPE OF THE PAVEMENT SURFACE, AND TO ALLOW FOR PROPER FINISHED RECESSED LID AND FRAME GRADES AS INDICATED IN NOTE 2.
5. A WATER TIGHT SEAL BETWEEN THE TOP OF CONE AND THE PLASTIC RISER FORM SHALL BE PROVIDED WITH SEALANT. SEALANT SHALL CONSIST OF A CONTINUOUS BEAD THAT COVER THE ENTIRE WIDTH OF THE BOTTOM FLANGE OF THE PLASTIC RISER FORM. TOP OF MANHOLE CONE SHALL BE CLEANED PRIOR TO PLACEMENT OF SEALANT.
6. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES
7. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.
8. CONCRETE COLLARS SHALL HAVE AN IDENTIFYING MARK SHOWING THE DIRECTION OF FLOW OR THE PIPE ORIENTATION FOR WATER LINES. MARK ALL LINE SIZES EXCEPT FOR 8"

STANDARD DRAWING 202-A REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	MANHOLE GRADE ADJUSTMENT IN PAVEMENT NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



PIPE SIZE	INSIDE DIAMETER	
	MAX.	MIN.
4"	3.80	3.58
6"	5.65	5.33
8"	7.56	7.14
10"	9.45	8.93
12"	11.25	10.63

SHALL BE INSTALLED WITH SMOOTH WALL PIPE FOR PIPE PENETRATIONS TO "CAST-IN-PLACE" AND "PRECAST" STRUCTURES

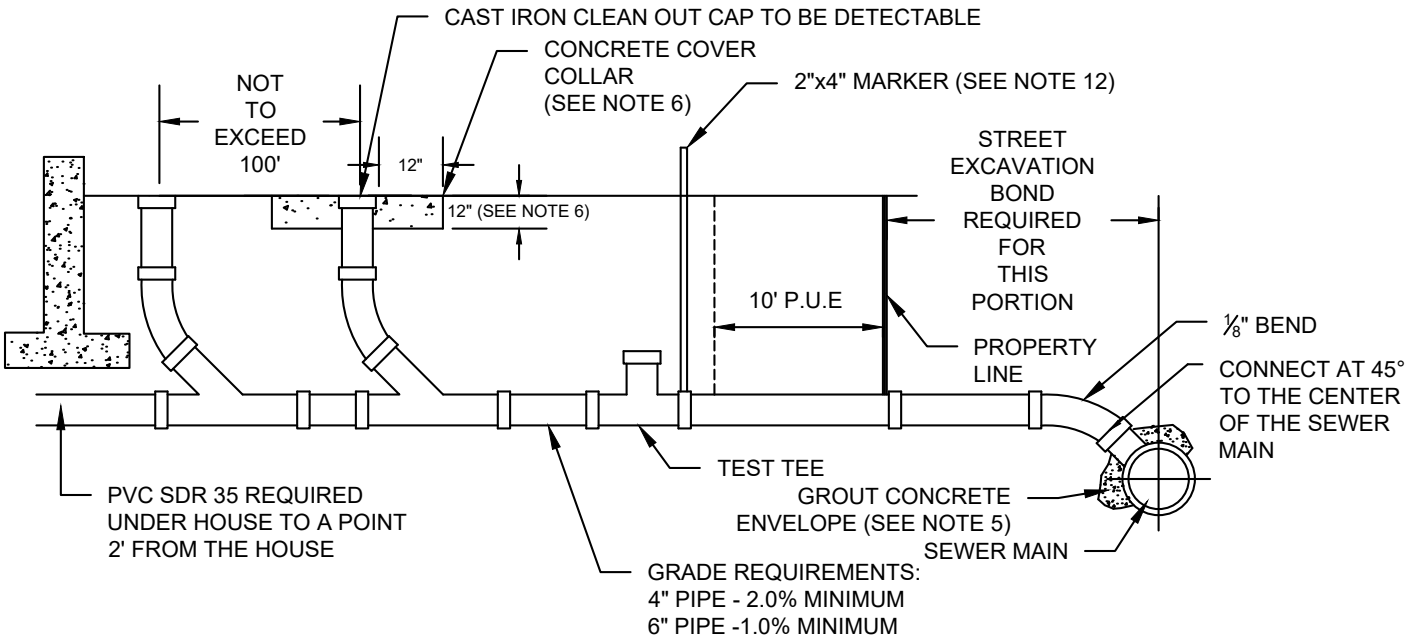
STANDARD DRAWING
203
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

MANHOLE ADAPTER RING ASSEMBLY

NOT TO SCALE

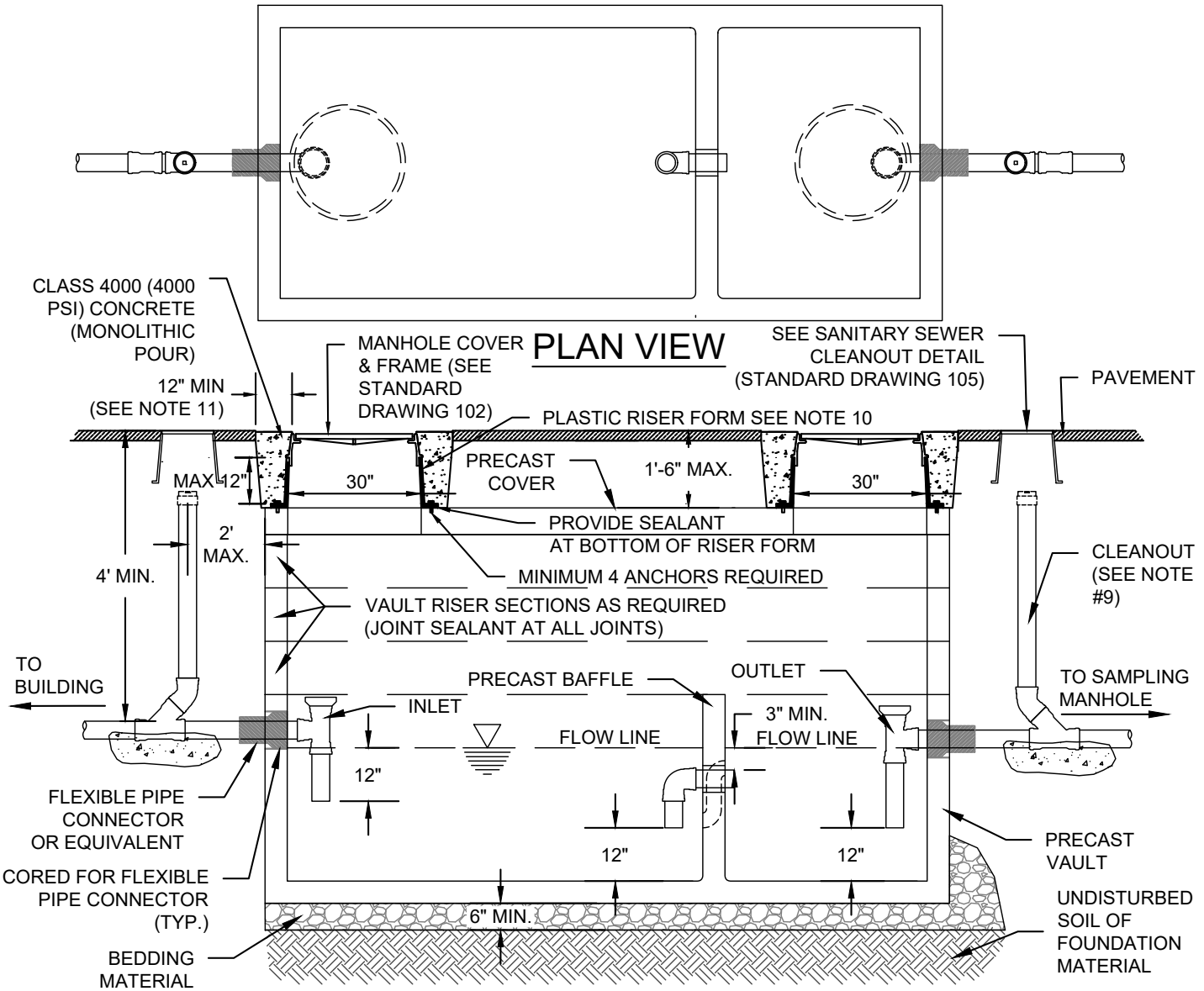
STANSBURY PARK IMPROVEMENT DISTRICT



NOTES:

1. CLEANOUT REQUIRED AT OUTSIDE OF HOUSE.
2. CLEANOUT REQUIRED AT 100' MAX. SPACING AND AT CHANGE IN DIRECTION, WHERE TOTAL AGGREGATE CHANGE EXCEEDS 135°.
3. ALL LATERALS CUT INTO EXISTING MAINS SHALL BE ADAPTED WITH SADDLES. (INSERTA-TEE OR EQUAL). INSTALL ACCORDING TO MANUFACTURERS RECOMMENDATIONS. GREASE SHALL BE APPLIED TO STAINLESS STEEL BAND. WHERE SADDLES ARE NOT WATER TIGHT, A CONCRETE ENVELOPE SHALL BE REQUIRED.
4. LATERALS SHALL NOT PROTRUDE INTO SEWER MAINS.
5. WHERE CLAY PIPE CONNECTS TO PVC, A CONCRETE ENVELOPE SHALL BE REQUIRED. OTHERWISE GROUT AROUND CONNECTION.
6. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES.
7. BEFORE BACKFILLING, SEWER INSPECTION OF INSTALLATION BY SPID. PROVIDE AT LEAST 24 HOURS NOTICE. ALL PIPE, FITTING, AND COUPLING SHALL BE APPROVED PRIOR INSTALLATION.
8. TAPE WRAP ANY METAL PIPE AND METAL FITTINGS.
9. DO NOT INSTALL COUPLINGS BELOW ANY OBSTRUCTIONS.
10. UNDER ANY OBSTRUCTION, LOOSELY COMPONENT GRANULAR MATERIAL OR SAND. FLOWABLE FILL NOT ALLOWED.
11. PIPE ZONE MATERIAL IS REQUIRED ALONG THE FULL LENGTH OF SEWER LATERALS ACCORDING TO SPID STANDARD CONSTRUCTION NOTES:
    - 11.1. STANSBURY PARK IMPROVEMENT DISTRICT INSTALLATION REQUIREMENTS
12. MARK SEWER LATERAL STUB:
    - 12.1. PAINT GREEN
    - 12.2. DEPTH OF CUT TO PIPE INVERT
    - 12.3. MAINTAIN RECORD DRAWINGS, INCLUDING MEASUREMENT AND DIRECTION OF LATERAL TO NEAREST CENTER OF SEWER MANHOLE.
13. INSTALL WIRE TRACER ALONG SEWER LATERALS, SECURED DIRECTLY TO THE TOP OF PIPE EVERY 10 INCHES, FROM THE WYE CONNECTION AT THE MAIN TO THE CLEANOUTS, AND EXTENDING TO THE EXTERIOR WALL AT THE BUILDING. ANTI-CORROSION GEL CAPS ARE REQUIRED AT ALL ENDS OF BURIED WIRE, AND AT WIRE SPLICING.

STANDARD DRAWING 204 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	SEWER CLEANOUTS DETAILS NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



NOTE:

1. THE GREASE INTERCEPTOR CAPACITY IS DEFINED AS THE STORAGE VOLUME OF THE VAULT BELOW THE OUTLET PIPE ELEVATION.
2. THE GREASE INTERCEPTOR SHALL HAVE A MINIMUM CAPACITY OF 1,000 GALLONS IF SERVING A COMMERCIAL KITCHEN OR 500 GALLONS IF SERVING A COVERED PARKING STRUCTURE.
3. THE INLET PIPE SHALL BE ONE INCH HIGHER THAN THE OUTLET PIPE.
4. ALL INTERIOR PIPING SHALL BE SOLVENT WELD PVC.
5. VENTING OF GREASE INTERCEPTOR SHALL NOT BE ALLOWED AT THE SURFACE. PROVIDE VENTING AT THE ROOF OF THE BUILDING OR STRUCTURE.
6. SANITARY WASTES SHALL NOT BE PLUMBED TO GREASE INTERCEPTOR.
7. THE DIMENSIONS AND CONFIGURATION OF THE VAULT AND BAFFLE SHALL BE ACCORDING TO THE MANUFACTURER'S REQUIREMENTS FOR THE SIZE OF INTERCEPTOR INSTALLED.
8. THE CLEANOUT UPSTREAM OF THE GREASE INTERCEPTOR MAY BE DELETED IF THE CLEANOUT AT THE BUILDING IS WITHIN 15 FT OF THE GREASE INTERCEPTOR AND THE LINE BETWEEN THE GREASE INTERCEPTOR AND THE CLEANOUT IS A STRAIGHT SEGMENT.
9. THE CLEANOUT DOWNSTREAM OF THE GREASE INTERCEPTOR MAY BE DELETED IF THE SAMPLING MANHOLE IS WITHIN 15 FT OF THE GREASE INTERCEPTOR AND THE LINE BETWEEN THE GREASE INTERCEPTOR AND THE SAMPLING MANHOLE IS A STRAIGHT SEGMENT.
10. INSTALL WHIRLYGIG MANHOLE RISER COLLAR SYSTEM PER STANDARD DRAWING 202-A.
11. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES.
12. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.

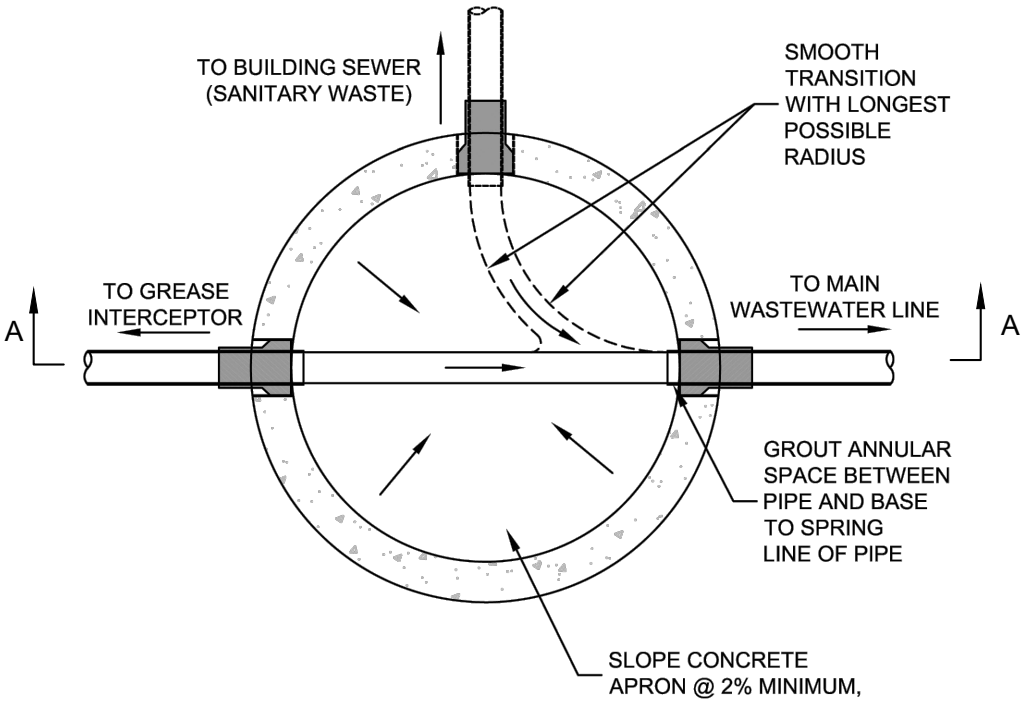
STANDARD DRAWING
205
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

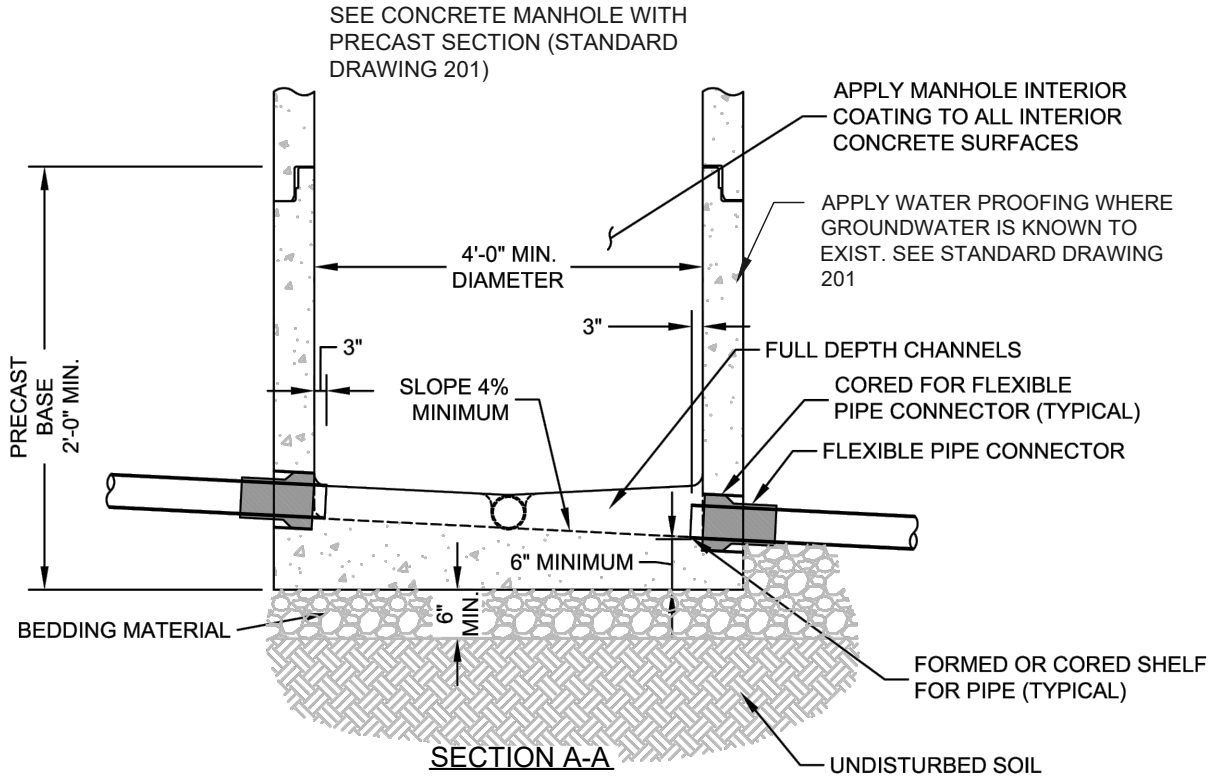
GREASE INTERCEPTOR

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



PLAN VIEW



SECTION A-A

STANDARD DRAWING 206 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	SAMPLING MANHOLE PRECAST BASE NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	

NOSE-ON SEWER LATERAL CONNECTION
SDR 35 GASKETED BELL GRAVITY APPLICATIONS

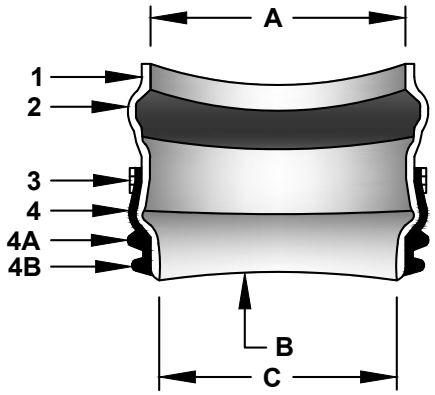
INSERTA TEE | PO BOX 714
CORNELIUS, OR 97113
PH:(503) 357-2110 FAX:(503) 359-5417
SALES@INSERTATEE.COM

A. EQUIVALENT O.BELL END ACCEPTS PIPE WITH SDR 35, ASTM D3034 OR EQUIVALENT O.D. SPECIFICATION IN 8", 10", 12", 15", 18", 21", 24", 27", AND 30" SIZES. (FOR 4" AND 6" SIZES REFER TO FATBOY SPECIFICATIONS).

B. CURVATURE VARIES WITH MAINLINE DIAMETERS.

C. SPIGOT END PVC SDR 35, ASTM D3034 DIAMETERS: 8", 10", 12", 15", 18", 21", 24", 27" AND 30"

INSERTA TEE SIZE	HOLE DIAMETER
8" (200 mm)	8 3/4" (222mm)
10" (250 mm)	10 7/8" (276mm)
12" (300 mm)	12 7/8" (327mm)
15" (375 mm)	15 13/16" (402mm)
18" (450 mm)	19 3/16" (503mm)
21" (525 mm)	22 9/16" (573mm)
24" (600 mm)	25 5/16" (643mm)
27" (675 mm)	28 1/2" (724mm)
30" (750 mm)	32 17/32" (826mm)



PART	PART NAME
1	HUB ADAPTOR
2	RUBBER GASKET (AVAILABLE IN NITRILE AND EPDM BY SPECIAL ORDER)
3	SECURING CLAMP*
4	RUBBER SLEEVE
4A	UPPER SEGMENT**
4B	LOWER SEGMENT***

MATERIALS
PVC SDR 35 ASTM D3034
ASTM F477
BAND SS #301
SCREW SS #305
HOUSING SS #301
ASTM F477

* OPTIONAL: #316 STAINLESS STEEL BAND, SCREW AND HOUSING
** DISTANCE BETWEEN 4A AND 4B WILL VARY BY PRODUCT TYPE
*** WILL NOT APPEAR ON RUBBER SLEEVES FOR CONCRETE OR CLAY PIPE

NOTES:

1. WHEN CONNECTING LATERALS TO EXISTING SEWER MAIN LINES, USE A NOSE-ON CONNECTION. INVERTS OF NEW LATERALS MUST BE MADE A 10:00 AND 2:00 POSITIONS.
   a. FOR NOSE-ON CONNECTIONS TO AN EXISTING 10-INCH MAIN OR LARGER, THE CONNECTION SHALL BE MADE USING AN INSERTA-TEE FITTING. CONNECTIONS SHALL BE CORE-DRILLED. RUBBER SLEEVES - ASTM F477, BANDS - 301 SS, SCREWS - 305 SS, HOUSING 301 SS, AND GASKETS - ASTM F477.
   b. FOR NOSE-ON CONNECTIONS TO AN EXISTING 6-INCH OR 8-INCH PVC MAIN, THE CONNECTION SHALL BE MADE BY SPLICING A FACTORY TEE INTO THE MAIN USING SLIP/REPAIR COUPLINGS. FERNCO-TYPE COUPLINGS ARE NOT PERMITTED.
   c. FOR NOSE-ON CONNECTIONS TO AN EXISTING 6 OR 8-INCH CONCRETE OR VITRIFIED CLAY MAIN, CONNECTION SHALL BE MADE USING AN INSERTA TEE FITTING.
   d. FOR NOSE-ON CONNECTIONS TO ANY OTHER TYPE OF PIPE SHALL BE APPROVED BY THE SPID.

   INSTALL ¾-INCH ROCK, 6 INCHES BELOW THE SEWER LATERAL ON UNDISTURBED GRADE (I.E., USING A FLAT-BLADE BUCKET), OR COMPACT GRADE AT BOTTOM OF UTILITY TRENCH PRIOR TO BACKFILL AND PIPE INSTALLATION. LOOSE OR NON-COMPACTED SUBGRADE AT BOTTOM OF TRENCH IS PROHIBITED. INSTALL ¾-INCH ROCK 1.0 FOOT MINIMUM ABOVE THE TOP OF THE LATERAL.

2. RECOMMENDED METHOD OF CUTTING HOLE IS WITH HOLE SAW FOR PVC AND OTHER PLASTICS, AND DIAMOND BIT FOR CONCRETES, CLAY, FRP AND D.I. (SEE MANUFACTURE'S INSTALLATION INSTRUCTIONS.)

STANDARD DRAWING
207-A
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

NOSE-ON SEWER LATERAL CONNECTION SDR 35 GASKETED BELL GRAVITY APPLICATIONS

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

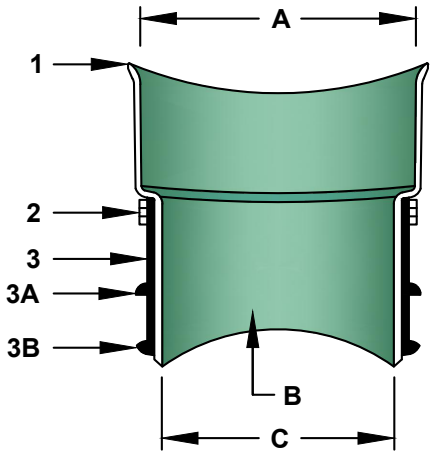
INSERTA TEE | PO BOX 714
CORNELIUS, OR 97113
PH:(503) 357-2110 FAX:(503) 359-5417
SALES@INSERTATEE.COM

NOSE-ON SEWER LATERAL CONNECTION CORRUGATED BELL FOR GRAVITY APPLICATIONS

A. BELL END ACCEPTS CORRUGATED POLYETHYLENE; AND PVC, CORRUGATED PIPE OR EQUIVALENT O.D. SPECIFICATIONS IN 4", 6", 8", 10", 12", 15", 18", 21", 24", 27" AND 30" SIZES.

B. CURVATURE VARIES WITH MAINLINE DIAMETERS.

C. SPIGOT END PVC SDR 35, ASTM D3034 DIAMETERS: 4", 6", 8", 10", 12", 15", 18", 21", 24", 27" AND 30"



INSERTA TEE SIZE		HOLE DIAMETER	
4"	(100 mm)	4 ½"	(114 mm)
6"	(150 mm)	6 ½"	(165 mm)
8"	(200 mm)	8 ¾"	(222 mm)
10"	(250 mm)	10 ⅞"	(276 mm)
12"	(300 mm)	12 ⅞"	(327 mm)
15"	(375 mm)	15 13/16"	(402 mm)
18"	(450 mm)	19 3/16"	(503 mm)
21"	(525 mm)	22 9/16"	(573 mm)
24"	(600 mm)	25 5/16"	(643 mm)
27"	(675 mm)	28 ½"	(724 mm)
30"	(750 mm)	32 17/32"	(826 mm)

PART	PART NAME
1	HUB ADAPTOR
2	SECURING CLAMP*
3	RUBBER SLEEVE (AVAILABLE IN NITRILE AND EPDM BY SPECIAL ORDER)
3A	UPPER SEGMENT**
3B	LOWER SEGMENT***
4	(NOT SHOWN) PIPE MANUFACTURER TO SUPPLY VALLEY GASKET

MATERIALS
PVC SDR 26 ASTM D3034
BAND SS #301
SCREW SS #305
HOUSING SS #301
ASTM F477

* OPTIONAL: #316 STAINLESS STEEL BAND, SCREW AND HOUSING
** DISTANCE BETWEEN 4A AND 4B WILL VARY BY PRODUCT TYPE
*** WILL NOT APPEAR ON RUBBER SLEEVES FOR CONCRETE OR CLAY PIPE

NOTES:

1. WHEN CONNECTING LATERALS TO EXISTING SEWER MAIN LINES, USE A NOSE-ON CONNECTION. INVERTS OF NEW LATERALS MUST BE MADE A 10:00 AND 2:00 POSITIONS.
   a. FOR NOSE-ON CONNECTIONS TO AN EXISTING 10-INCH MAIN OR LARGER, THE CONNECTION SHALL BE MADE USING AN INSERTA-TEE FITTING. CONNECTIONS SHALL BE CORE-DRILLED. RUBBER SLEEVES - ASTM F477, BANDS - 301 SS, SCREWS - 305 SS, HOUSING 301 SS, AND GASKETS - ASTM F477.
   b. FOR NOSE-ON CONNECTIONS TO AN EXISTING 6-INCH OR 8-INCH PVC MAIN, THE CONNECTION SHALL BE MADE BY SPLICING A FACTORY TEE INTO THE MAIN USING SLIP/REPAIR COUPLINGS. FERNCO-TYPE COUPLINGS ARE NOT PERMITTED.
   c. FOR NOSE-ON CONNECTIONS TO AN EXISTING 6 OR 8-INCH CONCRETE OR VITRIFIED CLAY MAIN, CONNECTION SHALL BE MADE USING AN INSERTA TEE FITTING.
   d. FOR NOSE-ON CONNECTIONS TO ANY OTHER TYPE OF PIPE SHALL BE APPROVED BY THE SPID.

   INSTALL ¾-INCH ROCK, 6 INCHES BELOW THE SEWER LATERAL ON UNDISTURBED GRADE (I.E., USING A FLAT-BLADE BUCKET), OR COMPACT GRADE AT BOTTOM OF UTILITY TRENCH PRIOR TO BACKFILL AND PIPE INSTALLATION. LOOSE OR NON-COMPACTED SUBGRADE AT BOTTOM OF TRENCH IS PROHIBITED. INSTALL ¾-INCH ROCK 1.0 FOOT MINIMUM ABOVE THE TOP OF THE LATERAL.
2. RECOMMENDED METHOD OF CUTTING HOLE IS WITH HOLE SAW FOR PVC AND OTHER PLASTICS, AND DIAMOND BIT FOR CONCRETES, CLAY, FRP AND D.I. (SEE MANUFACTURE'S INSTALLATION INSTRUCTIONS.)

STANDARD DRAWING
207-B
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

NOSE-ON SEWER LATERAL CONNECTION CORRUGATED BELL FOR GRAVITY APPLICATIONS

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

SPECIAL PROVISION TO APWA SECTION 33 08 00, PART 3.3 "GRADE AND ALIGNMENT TESTING"

STANSBURY PARK IMPROVEMENT DISTRICT ADOPTS THE APWA STANDARD SPECIFICATION 33 08 00 FOR COMMISSIONING OF SEWER AND STORM DRAIN LINES, WITH THE FOLLOWING AMENDMENTS:

TOLERANCES FOR PIPE PLACEMENT ARE AS FOLLOWS:

GRADE AND ALIGNMENT			
DESIGN GRADE	**TOLERANCES**		SLOPE CERTIFICATION REQUIRED (PER SPID STD DWG 208-B)
	GRADE	**ALIGNMENT**	
GREATER THAN 1%	$\frac{1}{2}$ INCH IN 10 FT	1" FROM TRUE LINE	NO
0.5 TO 1%	$\frac{1}{4}$ INCH IN 10 FEET	1" FROM TRUE LINE	NO
LESS THAN 0.5%, BUT GRATER THAN MINIMUM DESIGN SLOPE	$\frac{1}{4}$ INCH IN 100 FEET	1" FROM TRUE LINE	NO
AT MINIMUM ALLOWED DESIGN SLOPE	$\frac{1}{8}$ INCH IN 100 FEET	1" FROM TRUE LINE	YES

NOTES:

A. GRADE DOES NOT RESULT IN A LEVEL OR REVERSE SLOPING INVERT. STANDING WATER IS EVIDENCE OF NON-COMPLIANCE.

B. FOR CULVERTS, INCREASE TOLERANCES BY 50 PERCENT.

C. SPID STRICTLY ENFORCES STANDARD APWA NOTES A AND B AND MAINTAINS A "ZERO" TOLERANCE AND NON-ACCEPTANCE POLICY FOR FLAT BELLIES AND FLAT ZONES/SPOTS IN PIPELINES. CONTRACTOR SHALL CORRECT NON-CONFORMING WORK, AND RETELEVISE THE CORRECTED WORK UNTIL WORK IS IN COMPLIANCE.

DISTRICT'S MINIMUM ALLOWED DESIGN SLOPE	
PIPE SIZE	MINIMUM DESIGN SLOPE
8"	0.50%
10"	0.28%
12"	0.22%
14"	0.17%
15"	0.15%

DISTRICT'S MINIMUM ALLOWED DESIGN SLOPE (CON'T)	
PIPE SIZE	MINIMUM DESIGN SLOPE
16"	0.14%
18"	0.12%
21"	0.10%
24"	0.08%

STANDARD DRAWING
208-A
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

GRADE AND ALIGNMENT TEST

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

SECTION 01 45 50 S
(SPECIAL PROVISIONS)
SLOPE CERTIFICATION (SURVEY)

PART 1 GENERAL

1.1 SECTION INCLUDES

A. CONTRACTOR RESPONSIBILITIES FOR QUALITY AND QUALITY ASSURANCE RELATING CONSTRUCTED SEWER PIPE SLOPES.

1.2. QUALITY ASSURANCE

A. EMPLOY AND INDEPENDENT LICENSED AND SURVEYOR TO ASSURE "ASBUILT" PIPE SLOPES CONFORM TO PLANS AND SPECIFICATIONS.
B. USE STANDARD INDUSTRY PRACTICES AND TOLERANCES FOR SPECIFIED SURVEYING METHODS.
C. DO ADDITIONAL SURVEYING, IF, IN ENGINEER'S OPINION, WORK IS NOT BEING ADEQUATELY CONTROLLED.

1.3. SURVEYING PROFESSIONAL

A. PROVIDE SUFFICIENT PERSONNEL AND COOPERATE WITH ENGINEER AND CONTRACTOR IN PERFORMING DAILY SURVEYS.
B. CORRELATE CERTIFICATIONS WITH OWNER'S SURVEYS AND INSPECTIONS.
C. WHEN AN OUT-OF-TOLERANCE CONDITIONS EXISTS, PERFORM ADDITIONAL SURVEY'S UNTIL TOLERANCE IS ATTAINED.
D. REPORT ANY NON-COMPLIANCE PIPELINE SLOPES TO CONTRACTOR AND ENGINEER IMMEDIATELY.

1.4. EQUIPMENT

A. USE ONLY A TOTAL STATION OR LINE LEVEL LOOP WITH A "BEST SURVEY STANDARDS" MARGIN OF ERROR EQUAL TO +/- 0.02 FEET.
B. GPS SYSTEM NOT ALLOWED.

1.5. PROCEDURES

A. PRIOR TO ANY ABOVE PIPE BACKFILL, SURVEY ELEVATION OF CONSTRUCTED PIPE AT EACH MANHOLE, INCLUDING ALL EXTERIOR LEGS OF PIPE.
B. WHEN MANHOLES ARE SPACED MORE THAN 200 FEET APART, SURVEY THE MIDPOINT, OR NEAR THE MIDPOINT OF ALL SEWER LINES BETWEEN MANHOLES.
C. CALCULATE PIPE SLOPES BETWEEN EACH ELEVATION MEASUREMENT.
D. COORDINATE WITH CONTRACTOR AND CORRECT ANY WORK PRIOR TO ABOVE PIPE BACKFILL.
E. CERTIFICATION SHALL BE SUBMITTED TO SPID AND APPROVED FOR EACH RUN OF PIPE "MANHOLE TO MANHOLE", BEFORE ABOVE PIPE BACKFILL IS PLACED, AND CONTRACTOR COMMENCES THE INSTALLATION OF THE NEXT RUN OF PIPE "MANHOLE TO MANHOLE".

1.6. SUBMITTALS - SURVEY PROFESSIONAL

A. SEWER CERTIFICATION SHEET:
1. NAME, ADDRESS AND TELEPHONE NUMBER OF SURVEY PROFESSIONAL
2. DATE OF SURVEY
3. CERTIFICATION NUMBER
4. LOCATION OF SURVEY
5. SURVEY DATUM AND CONTROL
6. SURVEY INFORMATION IN THE FOLLOWING TABULAR FORM.

MANHOLE #	INVERT DIRECTION	ASBUILT ELEVATION	DESIGN ELEVATION	Δ

PIPE RUN	PIPE LENGTH	ASBUILT %	DESIGN %	Δ
MHxx-MHxx				

7. CERTIFICATION NARRATIVE BY SURVEYOR.
8. PROFESSIONAL'S STAMP AND SIGNATURE.

B. SUBMITTAL SCHEDULE
SUBMIT REPORTS TO ENGINEER BE THE END OF EACH DAY THAT SEWER LINES ARE CONSTRUCTED.

1.7 CONTRACTORS RESPONSIBILITY

A. SEWER LINES CONSTRUCTED THAT DO NOT MEET THE GRADE AND ALIGNMENT TOLERANCES IDENTIFIED IN STANDARD DRAWING 208-A SHALL BE CORRECTED AND RESURVEYED AND CERTIFIED.

1.8 DEVELOPER'S RESPONSIBILITY

A. THE DEVELOPER WILL PROVIDE STAKING OF "CRITICAL SLOPE" SEWERS (AT OR NEAR MINIMUM DESIGN SLOPES).
1. USING ONLY A TOTAL STATION OR LINE LEVEL LOOP WITH A "BEST SURVEY STANDARD" MARGIN OF ERROR EQUAL TO +/- 0.02 FEET.
2. GPS SYSTEM NOT ALLOWED.

STANDARD DRAWING 208-B REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	GRADE AND ALIGNMENT TEST NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	

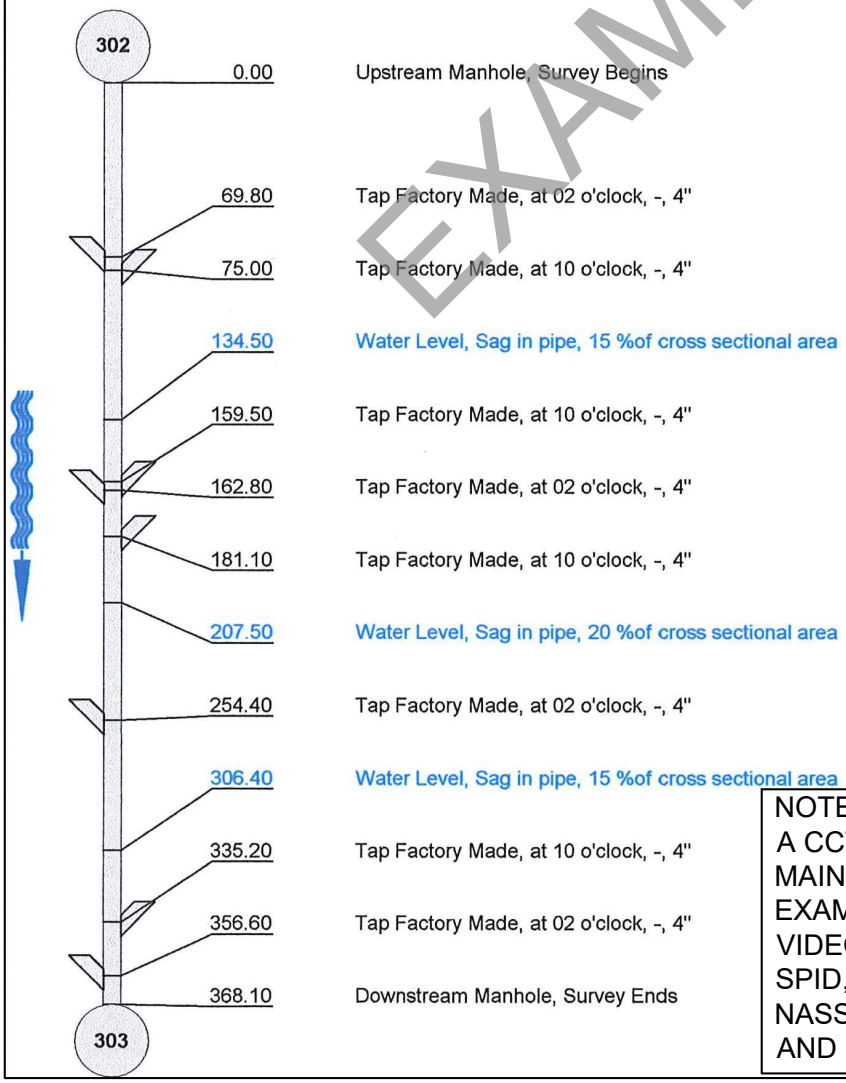
Inspection Report

Date	P/O. No.	Weather	Surveyor's Name	Pipe Segment Reference	Section No.
1/2/2018			**SEAN**		**2**
Certificate No.	**Survey Customer**	**System Owner**	**Date Cleaned**	**Pre-Cleaning**	**Sewer Category**
				No Pre-Cleaning	

Street123	**SR138 CASTLEROCK RD**	Use of Sewer		Upstream MH	**302**
City	**STANSBURY**	Drainage Area		Dowstream MH	**303**
Loc. details		Flow Control		Dir. of Survey	**Downstream**
Location Code		Length surveyed		Section Length	**368.10 ft**

Purpose of Survey	**Pre-Acceptance**	Joint Length	
Year Laid		Dia./Height	**8 inch**
Year Rehabilitated		Material	**Polyvinyl Chloride**
Tape / Media No.		Lining Method	

Add. Information :



NOTE:
A CCTV LOG IS REQUIRED FOR ALL MAINLINE SEWERS. THIS IS AN EXAMPLE OF A TYPICAL LOG, OR VIDEO INSPECTION REQUIRED BY SPID, TO BE PROVIDED BY A NASSCO PACP CERTIFIED COMPANY, AND ITS PERSONNEL.

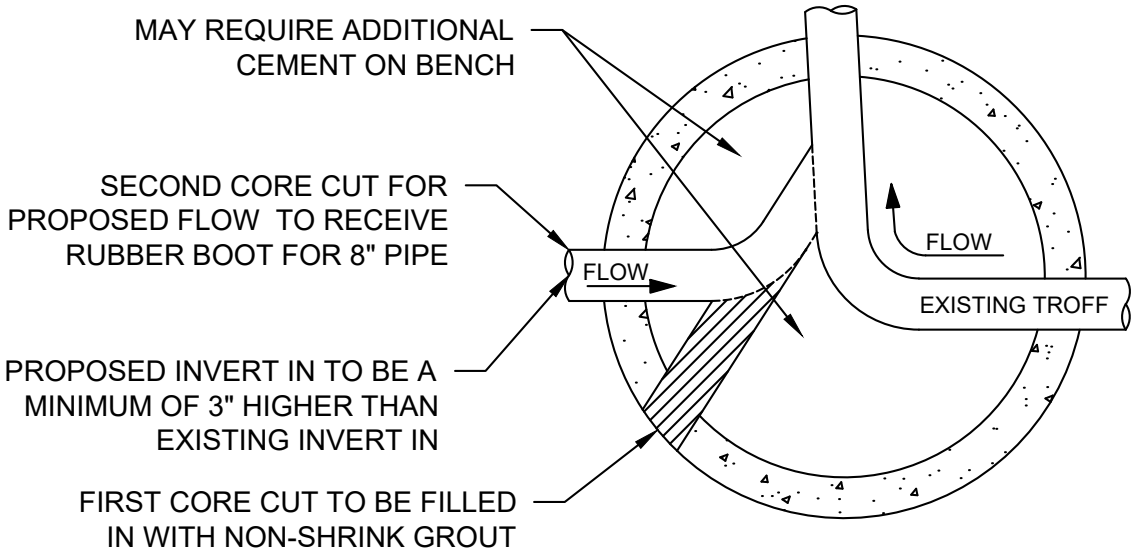
STANDARD DRAWING
209
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

EXAMPLE CCTV LOG

NOT TO SCALE

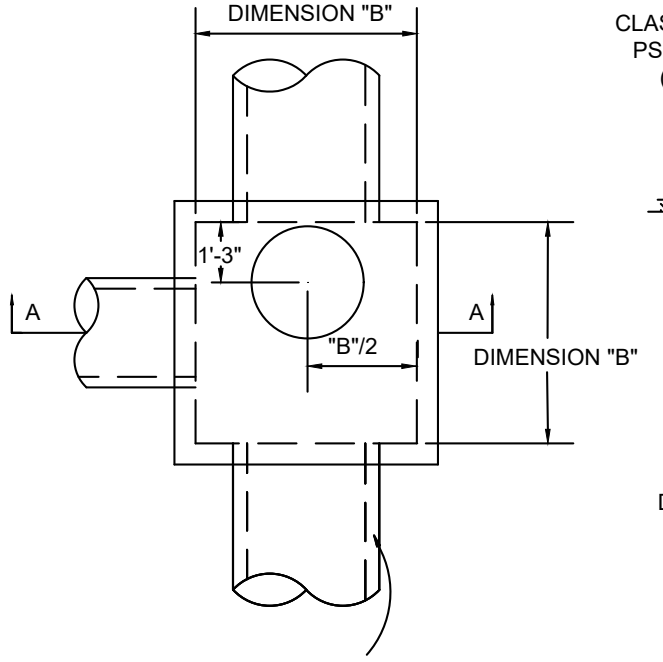
STANSBURY PARK IMPROVEMENT DISTRICT

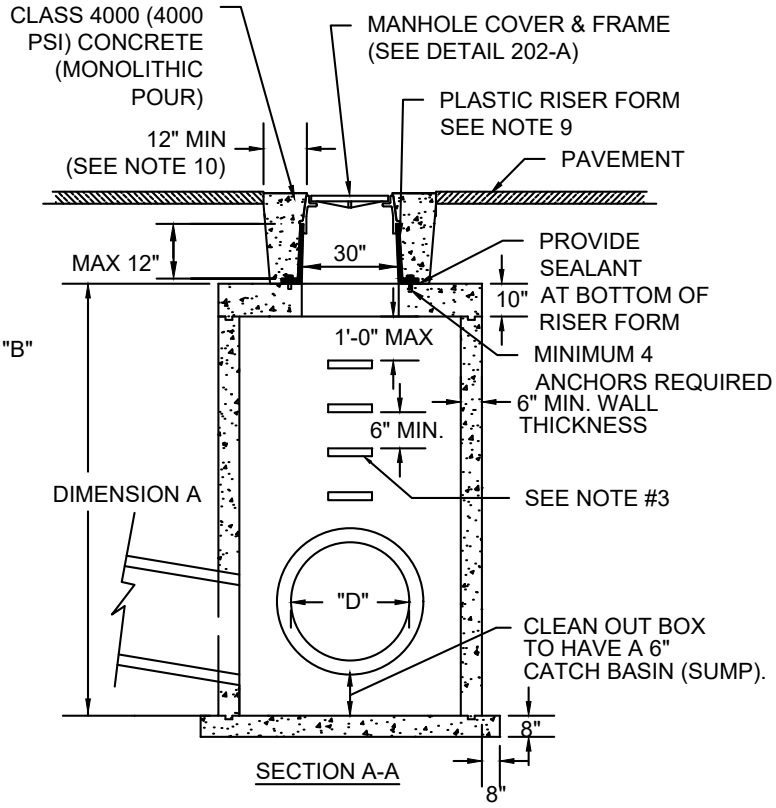


NOTES:

1. SPID IS REQUIRED TO BE ON SITE DURING ANY WORK ASSOCIATED WITH MANHOLE CORE CUTTING.

STANDARD DRAWING 211 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	MANHOLE CORE CUT NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	





PIPE SIZE "D"	MINIMUM DIMENSION "B"
15"	3'-6"
18"	3'-9"
21"	4'-0"
24"	4'-0"
27"	4'-0"
30"	4'-3"
33"	4'-6"
36"	4'-9"
42"	5'-3"
48"	6'-3"

NOTES:

1. MINIMUM DIMENSION "B" IS 3'-6".
2. BOTH PRECAST AND CAST-IN-PLACE BOXES ARE ACCEPTABLE AND REQUIRE SHOP DRAWINGS.
3. LADDER RUNGS ARE REQUIRED IN ALL BOXES OVER 4'-0" DEEP. BOTTOM RUNGS SHALL BE LOCATED 6" ABOVE PIPE. LADDER RUNGS CANNOT BE EMBEDDED IN KNOCK-OUT WALLS, AND MUST BE EMBEDDED IN WALLS 6-INCHES THICKER OR GREATER.
4. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH STANSBURY PARK IMPROVEMENT DISTRICT STANDARD SPECIFICATIONS.
5. ALL CONCRETE SHALL BE CLASS 4000 PER SECTION 03 30 04 OF A.P.W.A. STANDARD SPECIFICATIONS.
6. A UNIT CLEANOUT BOX SHALL INCLUDE MANHOLE COVER, FRAME, MANHOLE RUNGS IF REQUIRED, ADJUSTMENT OF MANHOLE TO GRADE, GRADE ADJUSTMENT W/ CONCRETE COLLAR, AND BOX COMPLETE.
7. SEE STANDARD DRAWING 301-C FOR MANHOLE STEPS/ LADDER RUNGS.
8. INSTALL WHIRLYGIG MANHOLE RISER COLLAR SYSTEM PER STANDARD DRAWING 202-A.
9. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES.
10. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.
11. CONCRETE COLLARS SHALL HAVE AN IDENTIFYING MARK SHOWING THE DIRECTION OF FLOW OR THE PIPE ORIENTATION FOR WATER LINES. MARK ALL LINE SIZES EXCEPT FOR 8"

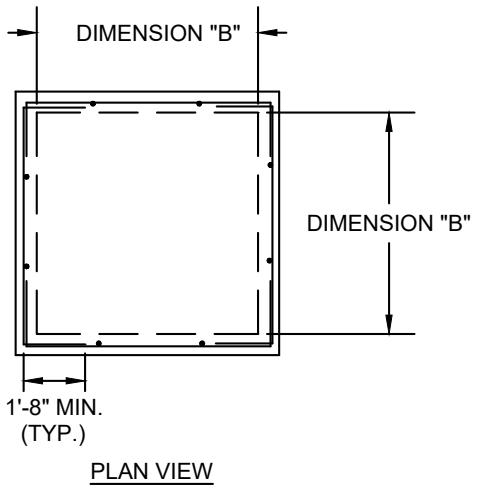
STANDARD DRAWING
301-A
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

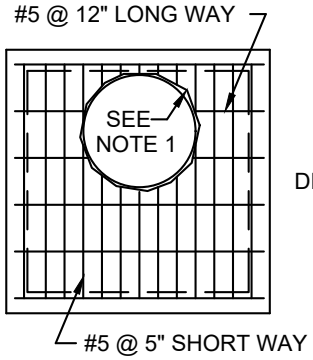
CLEANOUT BOX LAYOUT

NOT TO SCALE

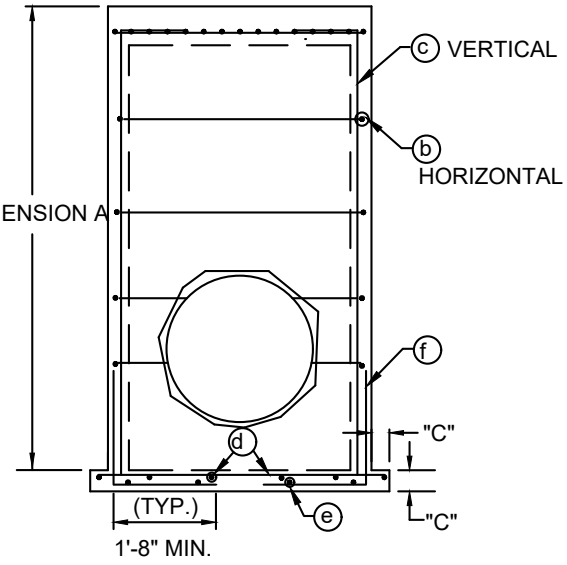
STANSBURY PARK IMPROVEMENT DISTRICT



PLAN VIEW



PLAN TOP SLAB



DIMENSION			BAR AND SIZE SPACING						WALL THICKENESS
A	B	C	a	b	c	d	e	f	
6'	3' TO 8'	10"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 12"	#5 @ 12"	#5 @ 18"	8"
7'	3' TO 8'	10"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 12"	#5 @ 12"	#5 @ 18"	8"
8'	3' TO 5'	10"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 12"	#5 @ 12"	#5 @ 18"	8"
8'	6' TO 8'	12"	#5 @ 10"	#5 @ 18"	#5 @ 18"	#5 @ 12"	#5 @ 12"	#5 @ 18"	8"
9'	3' TO 5'	12"	#5 @ 10"	#5 @ 18"	#5 @ 18"	#5 @ 9"	#5 @ 9"	#5 @ 18"	8"
9'	6' TO 8'	12"	#5 @ 9"	#5 @ 12"	#5 @ 15"	#5 @ 9"	#5 @ 9"	#5 @ 15"	8"
10'	3' TO 5'	12"	#5 @ 12"	#5 @ 12"	#5 @ 15"	#5 @ 9"	#5 @ 9"	#5 @ 15"	10"
10'	6' TO 8'	12"	#5 @ 9"	#5 @ 12"	#5 @ 15"	#5 @ 9"	#5 @ 9"	#5 @ 15"	10"
11'	3' TO 8'	12"	#5 @ 9"	#5 @ 12"	#5 @ 15"	#5 @ 9"	#5 @ 9"	#5 @ 15"	10"
12'	3' TO 8'	12"	#5 @ 9"	#5 @ 12"	#5 @ 12"	#5 @ 9"	#5 @ 9"	#5 @ 12"	10"
13'	3' TO 8'	12"	#5 @ 7"	#5 @ 12"	#5 @ 12"	#5 @ 9"	#5 @ 9"	#5 @ 12"	10"
14'	3' TO 8'	12"	#5 @ 7"	#5 @ 12"	#6 @ 12"	#5 @ 9"	#5 @ 9"	#5 @ 12"	10"
15'	3' TO 8'	12"	#5 @ 9"	#5 @ 12"	#5 @ 15"	#5 @ 9"	#5 @ 9"	#5 @ 9"	10"
16'	3' TO 8'	12"	#6 @ 6"	#5 @ 12"	#6 @ 9"	#5 @ 9"	#5 @ 9"	#5 @ 9"	10"

* FOR DIMENSION B SEE TABLE ON SHEET 1

NOTES

1. BARS USED AROUND OPENINGS MUST BE THE SAME SIZE AS THE LARGEST SIZE BAR IN ADJACENT WALL OR SLAB.
2. MINIMUM EMBEDMENT LENGTH FOR ALL BARS IS 1'-8"
3. ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE fy 60,000 PSI (fs = 24,000 PSI)
4. FIELD CUT OR BEND REINFORCING STEEL AS NECESSARY TO CLEAR PIPE(S) AND MAINTAIN 2" MINIMUM CLEARANCE.
5. SEE SHEET #1 FOR DIMENSIONS
6. SEE SHEET #3 FOR MANHOLES STEP DETAILS.
7. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH STANSBURY PARK IMPROVEMENT DISTRICT STANDARD SPECIFICATIONS,
8. ALL BOXES LOCATED UNDER STREET PAVEMENT SHALL BE CONSTRUCTED WITH EPOXY COATED STEEL BARS.

STANDARD DRAWING
301-B
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

CLEANOUT BOX REBAR INSTALLATION

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

1. ALL MANHOLE STEPS SHALL PROTRUDE 5" FROM INSIDE FACE OF THE STRUCTURE WALL AND SHALL BE EMBEDDED A MINIMUM OF 4" INTO THE STRUCTURE WALL.

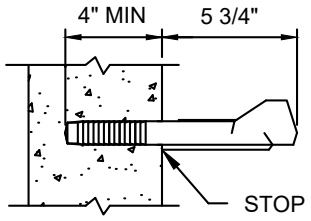
2. MANHOLE STEPS SHALL BE CAPABLE OF WITHSTANDING A SINGLE CONCENTRATED LOAD OF 300 POUNDS APPLIED AT A DISTANCE OF 5" FROM THE FACE OF THE STRUCTURE WALL.

3. STEPS ARE TO BE VERTICALLY ALIGNED AND UNIFORMLY SPACED WITH A MINIMUM SPACING OF 12" AND A MAXIMUM SPACING OF 16" UNLESS SHOWN OTHERWISE ON STRUCTURE PLANS.

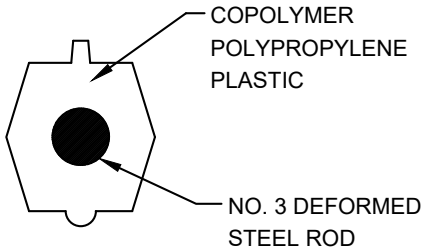
4. MANHOLE STEPS MAY BE CAST-IN-PLACE, OR GROUTED INTO STRUCTURE WALL IN SUCH A MANNER AS TO PREVENT PULLOUT UNDER A LOAD OF 300 POUNDS APPLIED 5" FROM THE FACE OF THE STRUCTURE WALL.

5. STEEL REINFORCING OF MANHOLE STEPS SHALL CONFORM TO ASTM DESIGNATION A-615, GRADE 60 PLASTIC COATING OF MANHOLE STEPS SHALL CONFORM TO ASTM DESIGNATION D-2146, TYPE II GRADE 16906.

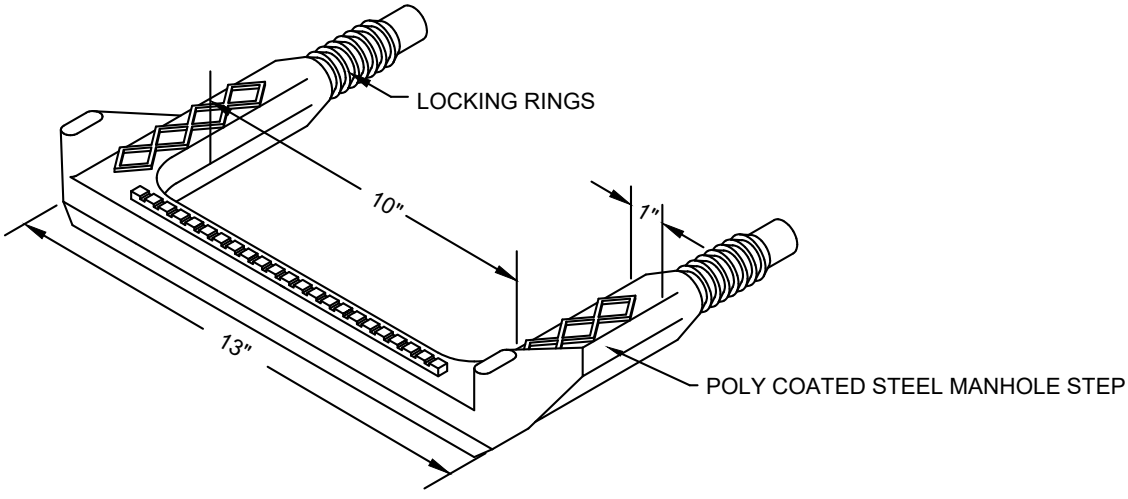
6. DIMENSIONS SHOWN MAY VARY ACCORDING TO MANUFACTURERS DESIGN.



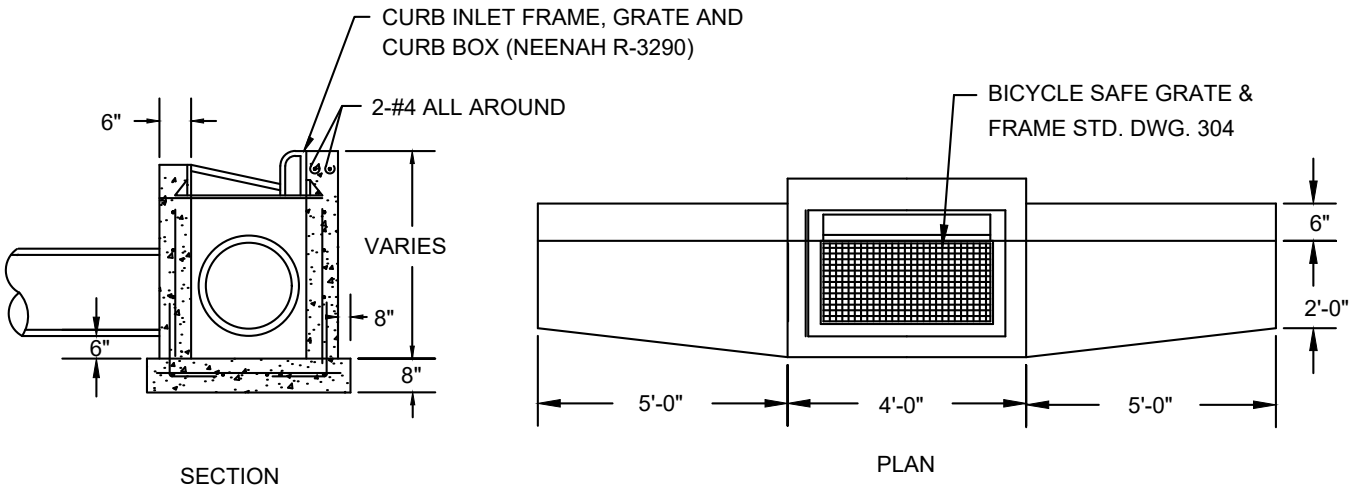
EMBEDDED SECTION



CROSS SECTION

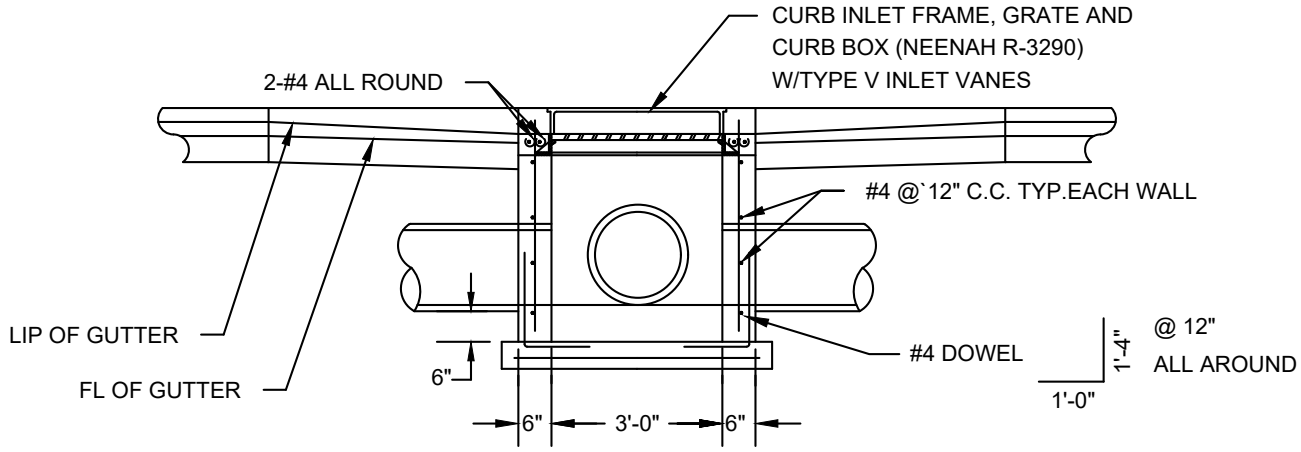


STANDARD DRAWING 301-C REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	CLEANOUT BOX MANHOLE STEP DETAIL NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



SECTION

PLAN



PROFILE

NOTE: TOP TO BE POURED SEPARATE FROM WALLS. FLOOR MAY BE POURED WITH WALLS. ALL CONCRETE TO BE APWA CLASS 4,000 WITH REINFORCING STEEL ASTM A615, GRADE 60, DEFORMED.

STEEL SCHEDULE

	VERT.STEEL	HORIZ.STEEL	WALL THICKNESS
0' TO 6'	#4 AT 12"O.C.	#4 AT 12"O.C.	6" WALL
6'-0" OR DEEPER, CHECK W/IMPROVEMENT DISTRICT			

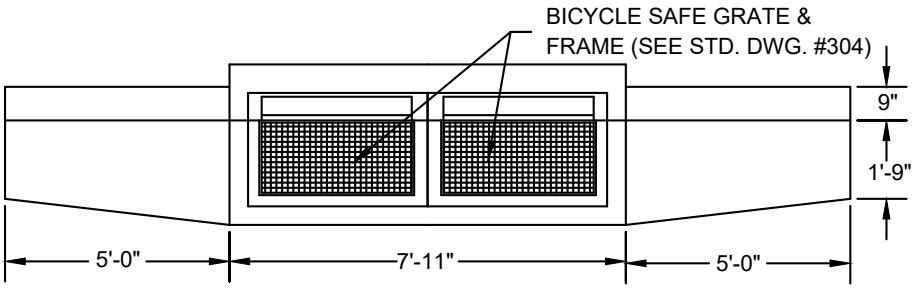
STANDARD DRAWING
302
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

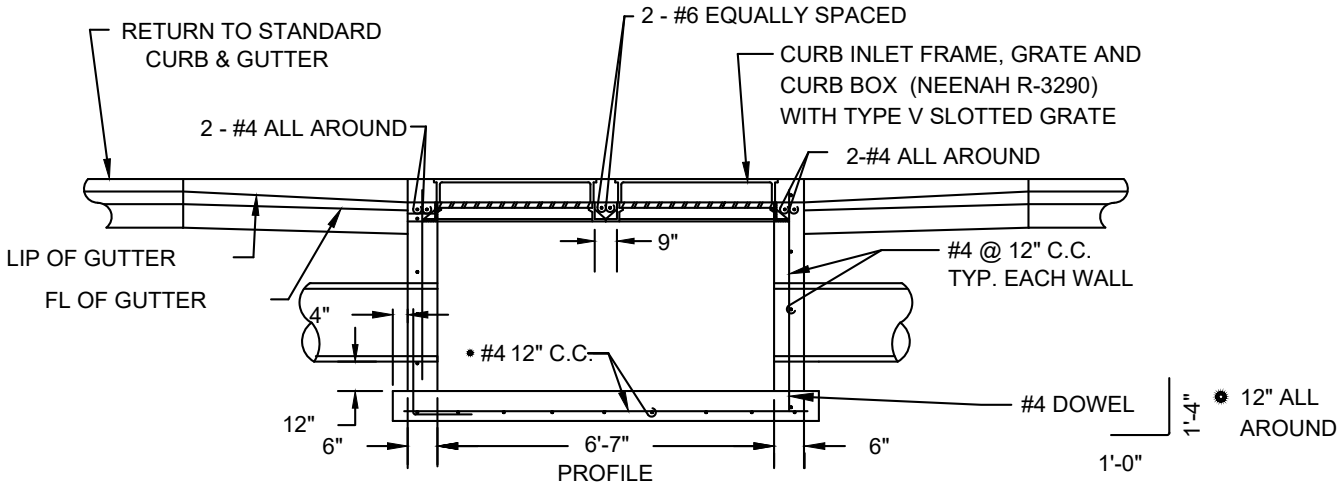
SINGLE GUTTER-INLET BOX

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

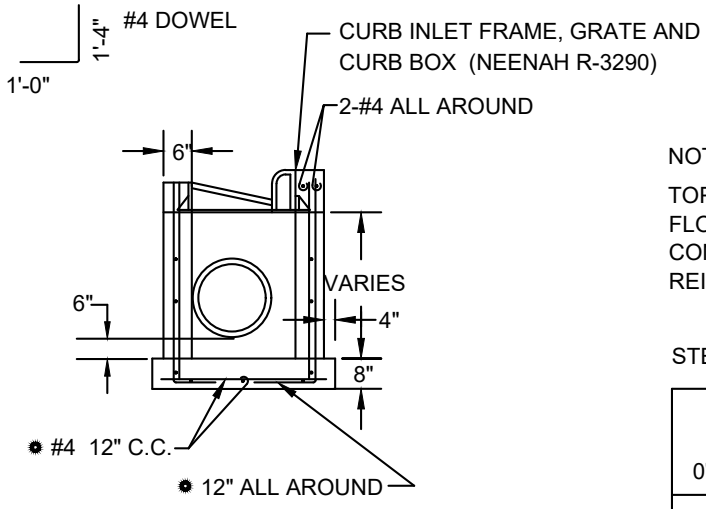


PLAN



PROFILE

DOUBLE STORM DRAIN INLET BOX



SECTION

NOTE:

TOP TO BE POURED SEPARATE FROM WALLS. FLOOR MAY BE POURED WITH WALLS. ALL CONCRETE TO BE APWA CLASS 4,000 WITH REINFORCING STEEL ASTM A615, GRADE 60, DEFORMED.

STEEL SCHEDULE

	VERT.STEEL	HORIZ.STEEL	WALL THICKNESS
0' TO 6'	#4 AT 12"O.C.	#4 AT 12"O.C.	6" WALL
6'-0" OR DEEPER, CHECK W/IMPROVEMENT DISTRICT			

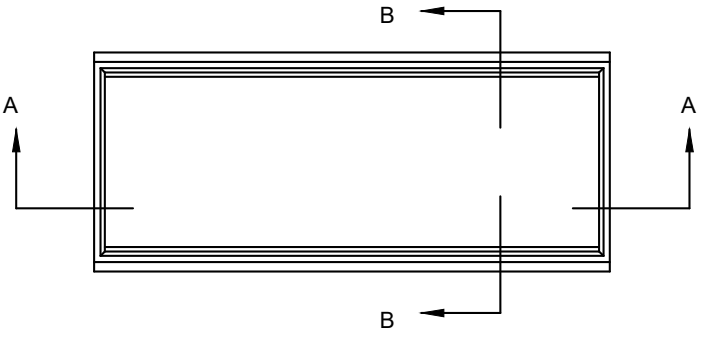
STANDARD DRAWING
303
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

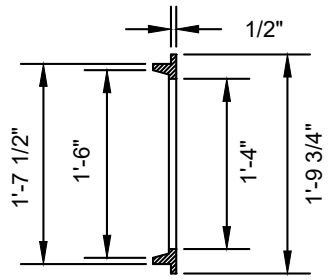
DOUBLE GUTTER-INLET BOX

NOT TO SCALE

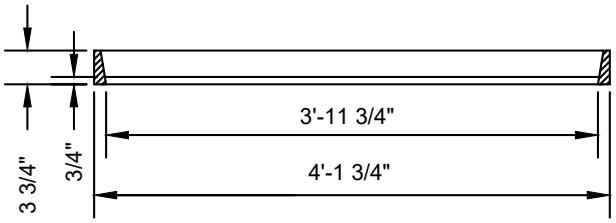
STANSBURY PARK IMPROVEMENT DISTRICT



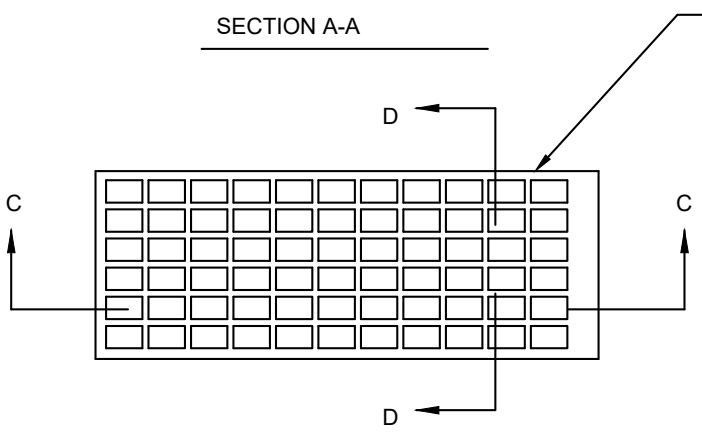
FRAME

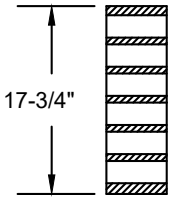


SECTION B-B

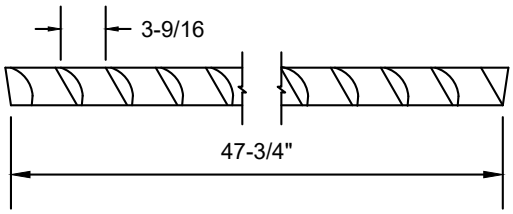


SECTION A-A





SECTION D-D



SECTION C-C

NOTES:

1. GREY IRON CASTING ASTM A48 CLASS 20 MIN.
2. COAT ALL PARTS WITH ASPHALTIUM PAINT.

STANDARD DRAWING
304
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

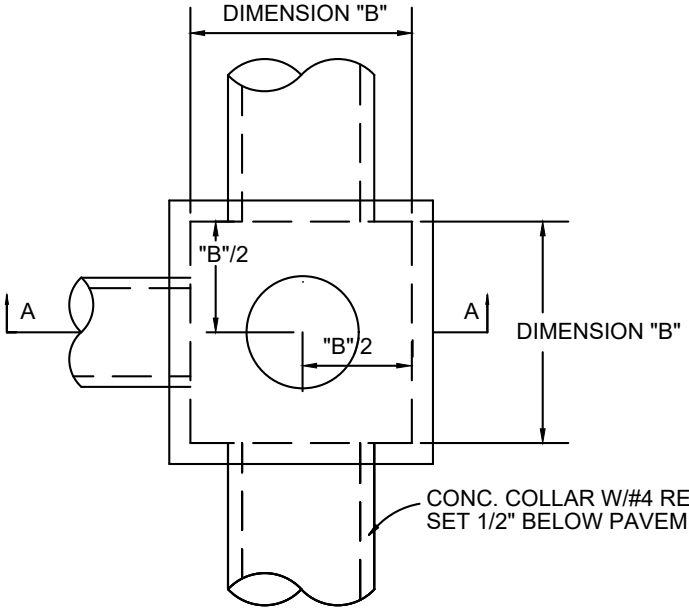
BICYCLE-SAFE GRATING AND FRAME

NOT TO SCALE

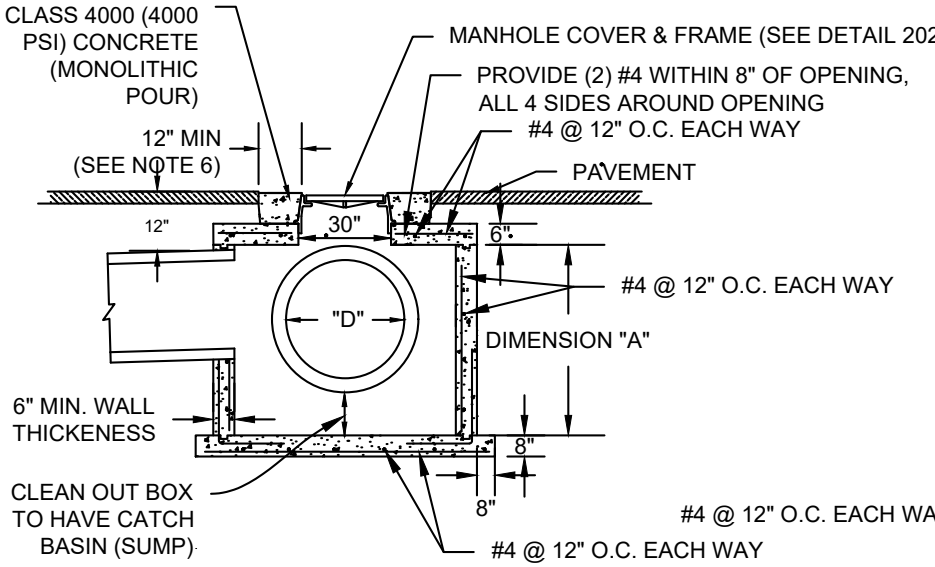
STANSBURY PARK IMPROVEMENT DISTRICT

1. JOINTS: PLACE FLEXIBLE GASKET-TYPE SEALANT IN ALL SECTION JOINTS
2. WATER STOPS. INSTALL WATER-STOPS ON ALL PLASTIC PIES WHEN CONNECTING PLASTIC PIPES TO CLENAOUT BOXES PER STANDARD DRAWING 403. HOLD WATER-STOP IN PLACE WITH STAINLESS STEEL BANDS
3. PIPE CONNECTIONS: GROUT ALL CONCRETE AND PLASTIC PIPE OPENINGS . EXTEND GROUT APRON 4 INCHES MINIMUM FROM EXTERIOR FACE OF BOX.
4. BACKFILL: PROVIDE BACKFILL AGAINST ALL OF THE BOX WALLS. PEA GRAVEL AND RECYCLED RAP AGGREGATE IS NOT ALLOWED. WATER JETTING IS NOT ALLOWED. MAXIMUM LIFT THICKNESS IS 8-INCHES BEFORE COMPACTION. COMPACTION IS 95 PERCENT OR GREATER RELATIVE TO A STANDARD PROCTOR DENSITY.
5. ACCEPTANCE / REJECTION: ANY BOX SECTIONS OR COMPONENTS THAT ARE DAMAGED UPON DELIVERY, STORAGE, OR INSTALLATIONS SHALL BE REJECTED AND REPLACED
6. CORE HOLES:
   - 6.1. PROVIDE CORE HOLES THAT ARE AT LEAST 4" LARGER THAN ATTACHING OUTER PIPE DIAMETER. CUT CORE HOLES AT THE MANUFACTURING PLANT UNLESS ENGINEER PERMITS FIELD HOLES.
   - 6.2. CENTER CORE HOLES TO LEAVE 2" OF CONCRETE MEASURED HORIZONTALLY FROM INSIDE WALL OF THE BOX TO CORE HOLE. LOCATE CORE HOLE VERTICALLY SO BOTTOM OF CORE HOLE WILL BE AT OR ABOVE FLOOR ELEVATION WITH AT LEAST 5-INCHES OF CONCRETE DIRECTLY ABOVE THE CORE HOLE OF THE TOP OF THE BOX. IN ORDER TO ELIMINATE THE NEED FOR WATERLINE LOOPS AND OTHER UTILITY CONFLICTS, STORM DRAIN LINES MAY BE RAISED, AS REQUIRED BY THE DISTRICT, AND CAST-IN-PLACE BOXES ALSO MAY BE REQUIRED BY THE ENGINEER AND/OR DISTRICT. SUCH BOXES ARE CONSIDERED DEVIATIONS AND SUBJECT TO SECTION 6.3 OF THE SPECIFICATIONS.
   - 6.3. DEVIATIONS FROM CORE HOLE TOLERANCES REQUIRE SHOP DRAWINGS. SHOP DRAWINGS WILL IDENTIFY LIFTING POINT NUMBER AND LOCATION.
7. PRECAST TOP: CONFORMS TO AASHTO HL-93 LIVE LOADING REQUIREMENTS.

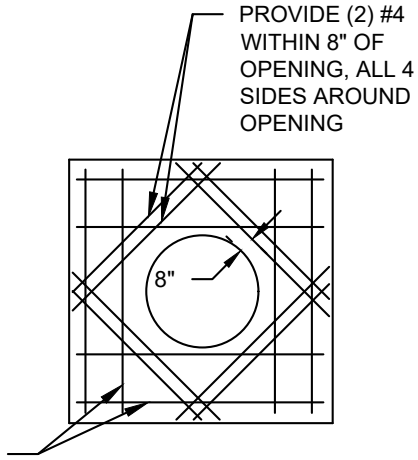
STANDARD DRAWING 305 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	STORM DRAIN CATCH BASIN, BOXES AND CLEANOUTS (SPECIFICATIONS) NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



PIPE SIZE "D"	MINIMUM DIMENSION "A"	MINIMUM DIMENSION "B"
15"	2'-2"	3'-6"
18"	2'-5"	3'-9"
24"	3'-0"	4'-0"
30"	3'-7"	4'-3"
36"	4'-2"	4'-9"
42"	4'-11"	5'-6"
48"	5'-6"	6'-3"



SECTION A-A



LID

NOTES:
1. MINIMUM DIMENSION "B" IS 3'-6".
2. ONLY CAST-IN-PLACE BOXES IS ACCEPTABLE AND REQUIRE SHOP DRAWINGS.
3. MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH STANSBURY PARK IMPROVEMENT DISTRICT STANDARD SPECIFICATIONS.
4. ALL CONCRETE SHALL BE CLASS 4000 PER SECTION 03 30 04 OF A.P.W.A. STANDARD SPECIFICATIONS.
5. A UNIT CLEANOUT BOX SHALL INCLUDE MANHOLE COVER, FRAME, MANHOLE RUNGS IF REQUIRED, ADJUSTMENT OF MANHOLE TO GRADE, GRADE ADJUSTMENT W/ CONCRETE COLLAR, AND BOX COMPLETE.
6. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES.
7. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.

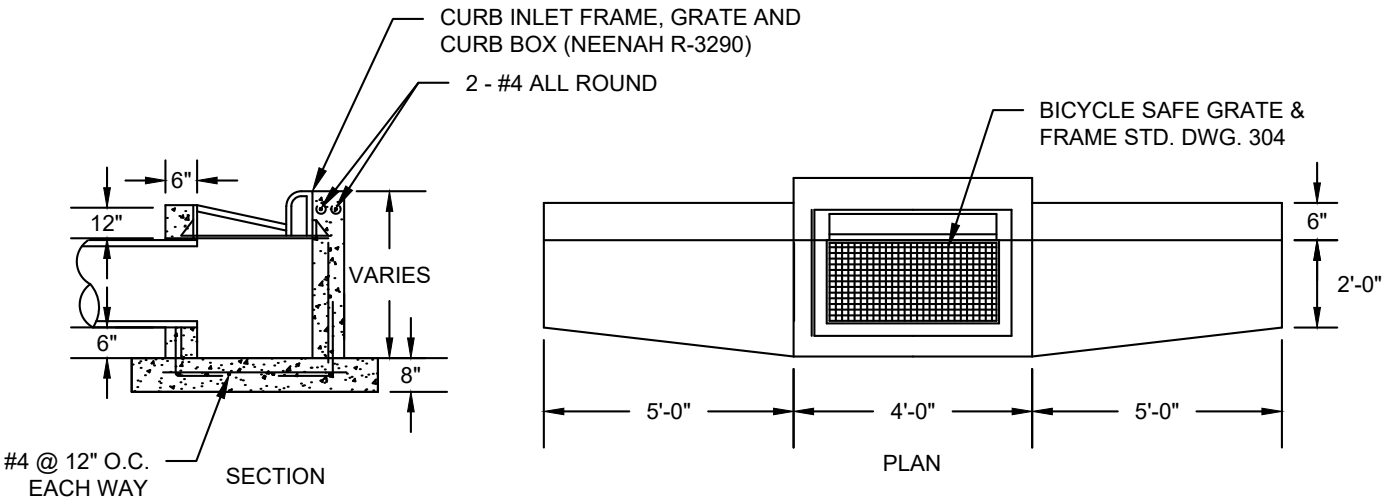
STANDARD DRAWING
306
REV.: 05-14-2026

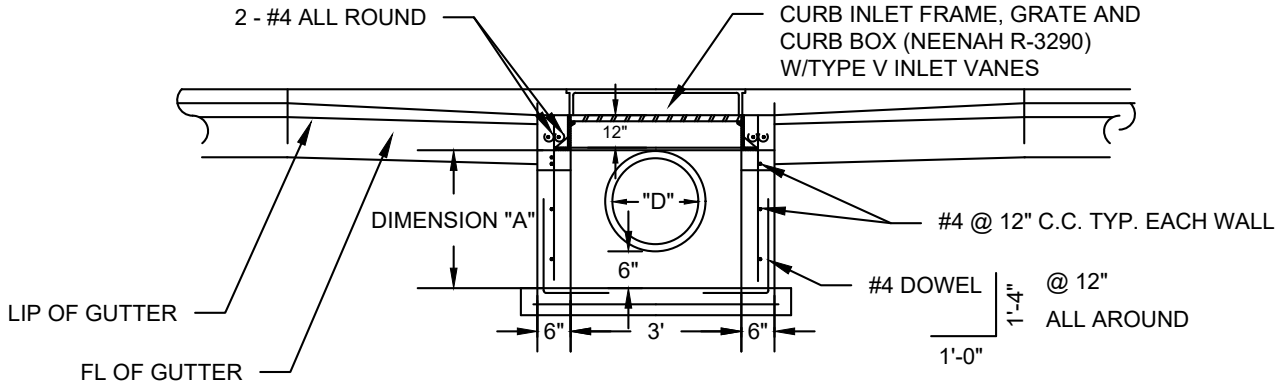
Brendan Thorpe P.E.
District Engineer

SHALLOW CLEANOUT BOX CAST IN PLACE

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT





PROFILE

NOTE:
1. TOP TO BE POURED SEPARATE FROM WALLS, FLOOR. MAY BE POURED WITH WALLS. ALL CONCRETE TO BE APWA CLASS 4,000 WITH REINFORCEMENT STEEL ASTM A615, GRADE 60, DEFORMED.

STEEL SCHEDULE

0' TO 6'	VERT STEEL	HORIZ STEEL	WALL THICKNESS
	#4 @ 12"O.C.	#4 @ 12"O.C.	6" WALL

PIPE SIZE "D"	MINIMUM DIMENSION "A"
15"	2'-2"
18"	2'-5"

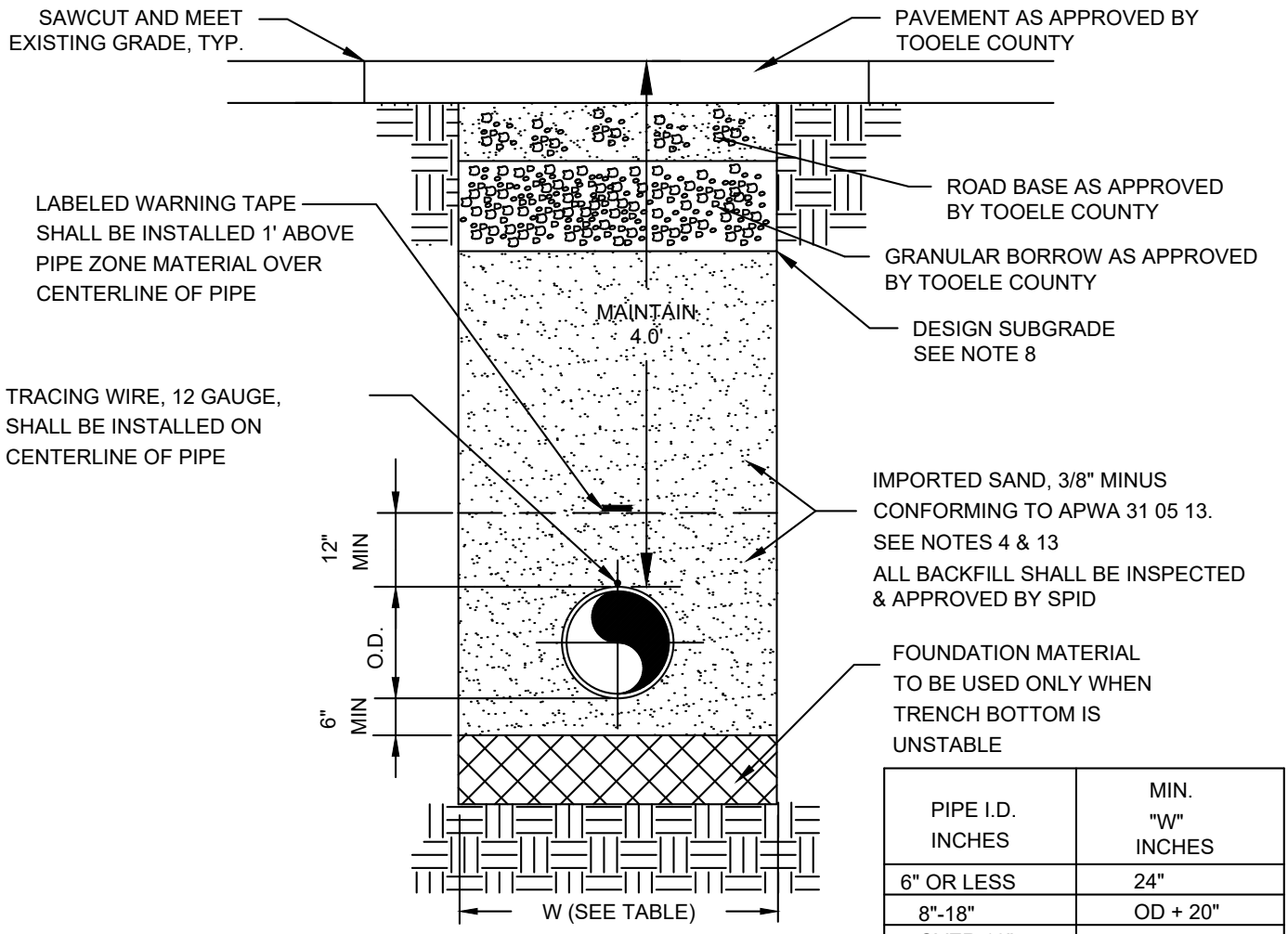
STANDARD DRAWING
307
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

SHALLOW SINGLE GUTTER-INLET BOX CAST IN PLACE

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



PIPE I.D. INCHES	MIN. "W" INCHES
6" OR LESS	24"
8"-18"	OD + 20"
OVER 18"	OD + 36"

NOTES:

REFER TO STANDARD DRAWING 401-A2 FOR CONSTRUCTION NOTES

STANDARD DRAWING
401-A1
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

WATER TRENCH BACKFILL DETAIL

NOT TO SCALE

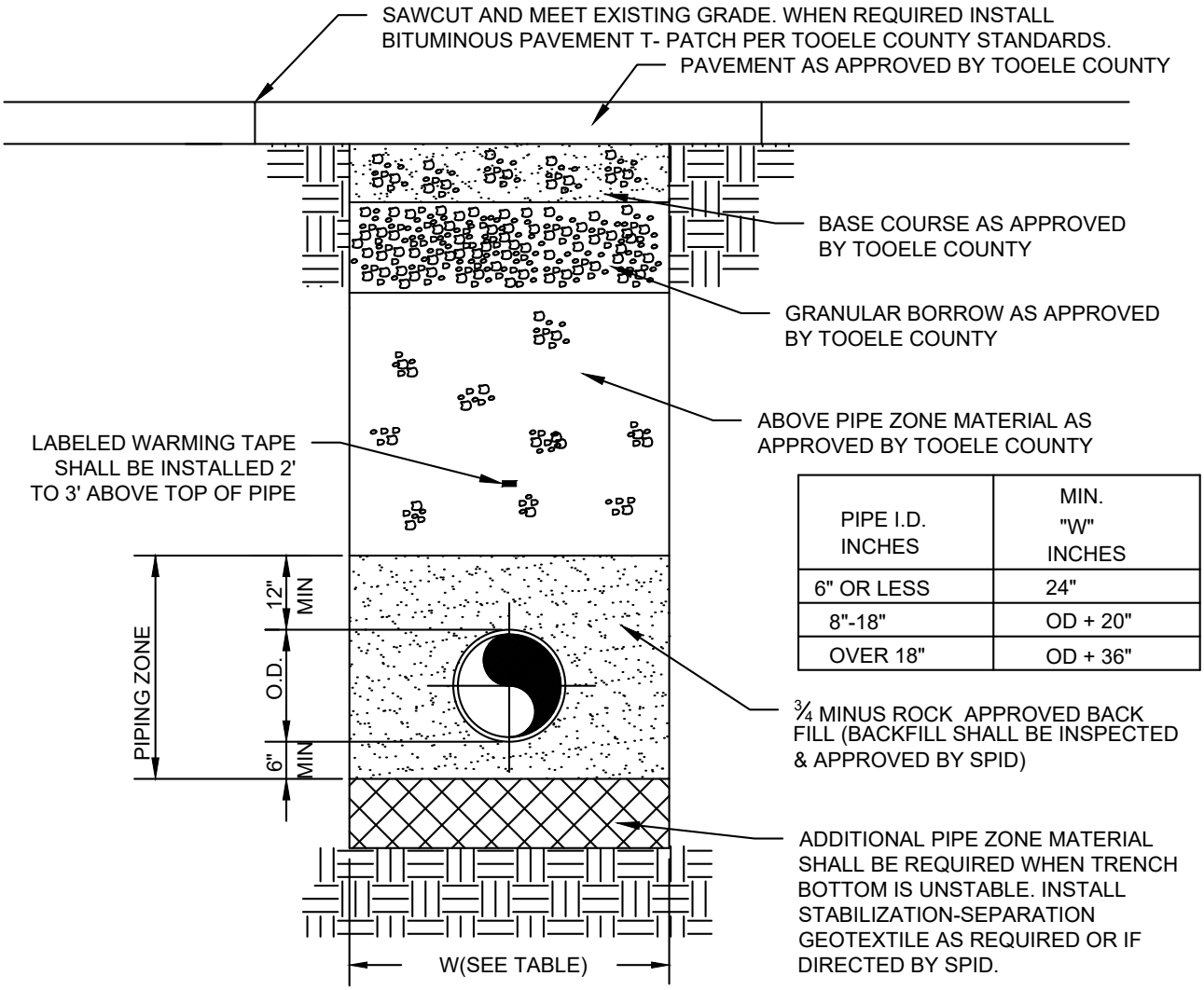
STANSBURY PARK IMPROVEMENT DISTRICT

THE NOTES ON THIS SHEET REFER TO THE TRENCH SECTION PROVIDED ON STANDARD DRAWING 401-A1

NOTES:

1. TRACING WIRE SHALL BE CONTINUOUS WITH WIRELOOP PLACED AT THE BASE OF THE HYDRANT.
2. CONTRACTOR SHALL CONFORM TO THE STATE OF UTAH "RULES FOR DRINKING WATER FACILITY CONSTRUCTION DESIGN AND OPERATION", R309-SERIES 500.
3. CONTRACTOR TO NOTIFY SPID FOR CHLORINE TEST PRIOR TO FLUSHING LINES. CHLORINE LEFT IN PIPE 24 HOURS MINIMUM WITH 25 PPM RESIDUAL. AWWA STD. C651, BACTERIA (TOTAL COLIFORM) TEST REQUIRED FOR NEW WATER LINES.
4. ABOVE THE PIPE ZONE MATERIAL MAY BE NATIVE SOILS ONLY WHEN OUTSIDE OF PAVED SURFACES OR SURFACES THAT ARE NOT STRUCTURLY LOADED.
5. UNDER NO CIRCUMSTANCE SHALL THE PIPE OR ACCESSORIES BE DROPPED INTO THE TRENCH.
6. DUCTILE IRON PIPE SHALL BE INSTALLED PER AWWA STANDARD C600-05, "INSTALLATION OF DUCTILE IRON WATER MAINS AND THEIR APPURTENANCE".
7. PVC PIPE SHALL BE INSTALLED PER ASTM D2774, "RECOMMENDED PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING AND PVC PIPE" AND THE PROVISIONS OF THE FOLLOWING PUBLICATION SHALL BE FOLLOWED FOR PVC PIPE DESIGN AND INSTALLATION: "PVC PIPE-DESIGN AND INSTALLATION, AWWA MANUAL M23,2002, PUBLICATION BY THE AMERICAN WATER WORKS ASSOCIATION."
8. SITE AND ROADWAY EMBANKMENT SHALL BE BROUGHT TO FINISHED SUBGRADE ELEVATIONS PRIOR TO COMMENCING THE UTILITY TRENCHING AND INSTALLATION OF ANY WATER LINE
9. INSTALL PERMANENT, BRIGHT COLORED, CONTINUOUS PRINTED MAGNETIC PLASTIC TAPE, INTENDED FOR DIRECT BURIAL SERVICE; NOT LESS THAN SIX (6) INCHES WIDE BY FOUR (4) MILS THICK. TAPE SHOULD READ "CAUTION BURIED INSTALLATION BELOW". COLOR SHALL BE BLUE, INDICATING BURIED WATER LINE.
10. BEDDING MATERIAL:
    - 10.1. SUBMIT AGGREGATE BATCH DELIVERY TICKETS SHOWING NAME OF MATERIAL SOURCE, SERIAL NUMBER OF TICKET, DATE AND TRUCK NUMBER, NAME OF SUPPLIER, JOB NAME AND LOCATION, VOLUME OR WEIGHT, AND AGGREGATE CLASSIFICATION.
    - 10.2. SPID SHALL APPROVE SUBMITTAL AND SOURCE SAMPLE PRIOR TO INSTALLATION.
    - 10.3. MAINTAIN UNIFORM FOUNDATION ALONG BARREL OF PIPE WITH SUFFICIENT RELIEF FOR JOINT CONNECTIONS. MAKE BELL HOLES BEFORE LAYING BELL AND SPIGOT PIPE IN PIPE ZONE.
    - 10.4. DO NOT PERMIT FREE FALL BACKFILL MATERIAL THAT MAY DAMAGE PIPE, PIPE FINISH, OR PIPE ALIGNMENT.
11. ABOVE PIPE ZONE:
    - 11.1. ALL MATERIALS, WORKMANSHIP, COMPACTION, TESTING, AND QUALITY CONTROL SHALL BE IN ACCORDANCE WITH TOOELE COUNTY STANDARD PLANS AND SPECIFICATIONS. SUPPLEMENTARY, AND /OR SUPPORTING DOCUMENTS ARE:
      - 11.1.1. APWA SECTION 33 05 20: BACKFILLING TRENCHES.
      - 11.1.2. APWA SECTION 01 45 00: QUALITY CONTROL.
      - 11.1.3. APWA SECTION 31 25 23: COMPACTION.
12. NOTIFY TOOLE COUNTY ROADS DEPARTMENT FOR ALL "ABOVE PIPE ZONE" INSPECTION AND ACCEPTANCE, ACCORDING TO TOOELE COUNTY REQUIREMENTS.
13. CONTRACTOR SHALL SUBMIT PIPE BEDDING AND TRENCH BACKFILL MATERIAL GRADATION AND SOURCE TO SPID GENERAL MANAGER, TOGETHER WITH LAB-MEASURED MAXIMUM DRY DENSITY, FOR APPROVAL PRIOR TO ANY INSTALLATION.

STANDARD DRAWING 401-A2 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	WATER TRENCH BACKFILL DETAIL NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



PIPE I.D. INCHES	MIN. "W" INCHES
6" OR LESS	24"
8"-18"	OD + 20"
OVER 18"	OD + 36"

NOTES:

1. CONTRACTOR TO FLUSH AND CLEAR PIPES PRIOR TO NOTIFYING DISTRICT THAT SEWER LINES ARE READY FOR TESTING. THE CONTRACTOR WILL RUN A MANDREL TEST AND AIR TEST AFTER INSTALLATION AND PRIOR TO PAVING. ALL TESTING TO BE DONE PER SPID SPECIFICATIONS AND STANDARDS. THE DISTRICT WILL VIDEO TAPE THE SEWER MAINS AT THE DEVELOPER'S EXPENSE.
2. INSTALL PERMANENT, BRIGHT COLORED, CONTINUOUS PRINTED MAGNETIC PLASTIC TAPE, INTENDED FOR DIRECT BURIAL SERVICE; NOT LESS THAN SIX (6) INCHES WIDE BY FOUR (4) MILS THICK. TAPE SHOULD READ "CAUTION BURIED INSTALLATION BELOW". COLOR SHALL BE GREEN, INDICATING BURIED SEWER LINE.
3. BEDDING MATERIAL:
   - 3.1. SUBMIT AGGREGATE BATCH DELIVERY TICKETS SHOWING NAME OF MATERIAL SOURCE, SERIAL NUMBER OF TICKET, DATE AND TRUCK NUMBER, NAME OF SUPPLIER, JOB NAME AND LOCATION, VOLUME OR WEIGHT, AND AGGREGATE CLASSIFICATION.
   - 3.2. SPID SHALL APPROVE SUBMITTAL AND SOURCE SAMPLE PRIOR TO INSTALLATION.
   - 3.3. MAINTAIN UNIFORM FOUNDATION ALONG BARREL OF PIPE WITH SUFFICIENT RELIEF FOR JOINT CONNECTIONS. MAKE BELL HOLES BEFORE LAYING BELL AND SPIGOT PIPE IN PIPE ZONE.
   - 3.4. DO NOT PERMIT FREE FALL BACKFILL MATERIAL THAT MAY DAMAGE PIPE, PIPE FINISH, OR PIPE ALIGNMENT.
4. INSTANTIATION: FOLLOW ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS.
5. ABOVE PIPE ZONE:
   - 5.1. ALL MATERIALS, WORKMANSHIP, COMPACTION, TESTING, AND QUALITY CONTROL SHALL BE IN ACCORDANCE WITH TOOELE COUNTY STANDARD PLANS AND SPECIFICATIONS. SUPPLEMENTARY, AND /OR SUPPORTING DOCUMENTS ARE:
     - 5.1.1. APWA SECTION 33 05 20: BACKFILLING TRENCHES.
     - 5.1.2. APWA SECTION 01 45 00: QUALITY CONTROL.
     - 5.1.3. APWA SECTION 31 25 23: COMPACTION.
6. NOTIFY TOOLE COUNTY ROADS DEPARTMENT FOR ALL "ABOVE PIPE ZONE" INSPECTION AND ACCEPTANCE, ACCORDING TO TOOELE COUNTY REQUIREMENTS.

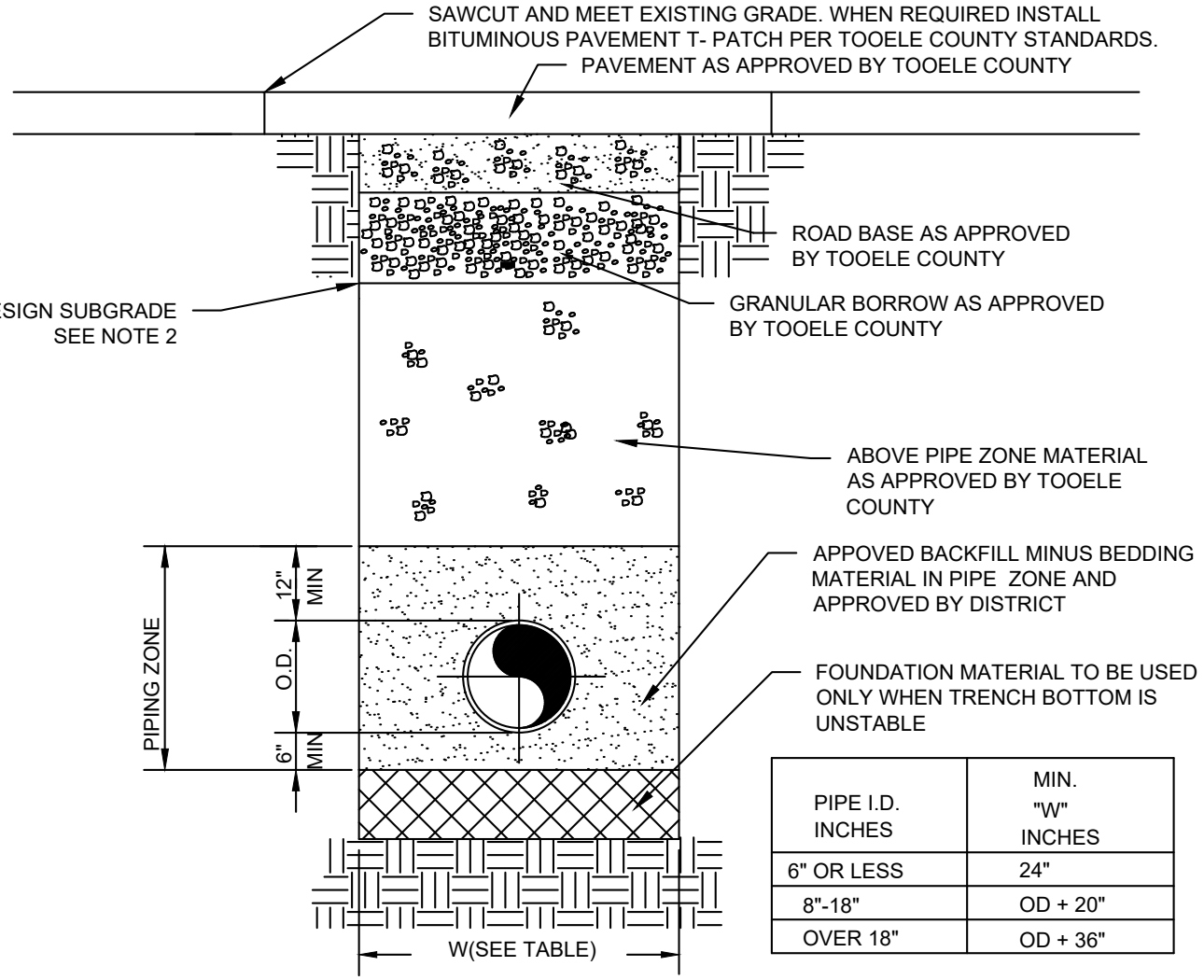
STANDARD DRAWING
401-B
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

SEWER TRENCH BACKFILL DETAIL

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



PIPE I.D. INCHES	MIN. "W" INCHES
6" OR LESS	24"
8"-18"	OD + 20"
OVER 18"	OD + 36"

NOTES:

1. CONTRACTOR TO FLUSH AND CLEAR PIPES PRIOR TO NOTIFYING DISTRICT THAT STORM DRAIN LINES ARE READY FOR TESTING. THE CONTRACTOR WILL AIR TEST AFTER INSTALLATION AND PRIOR TO PAVING. ALL TESTING TO BE DONE AS PER SPID SPECIFICATIONS AND STANDARDS AT THE DEVELOPER'S EXPENSE.
2. SITE AND ROADWAY EMBANKMENT SHALL BE BROUGHT TO FINISHED SUBGRADE ELEVATIONS PRIOR TO COMMENCING THE UTILITY TRENCHING AND INSTALLATION OF ANY STORM DRAIN LINE
3. BEDDING MATERIAL:

3.1. SUBMIT AGGREGATE BATCH DELIVERY TICKETS SHOWING NAME OF MATERIAL SOURCE, SERIAL NUMBER OF TICKET, DATE AND TRUCK NUMBER, NAME OF SUPPLIER, JOB NAME AND LOCATION, VOLUME OR WEIGHT, AND AGGREGATE CLASSIFICATION.

3.2. SPID SHALL APPROVE SUBMITTAL AND SOURCE SAMPLE PRIOR TO INSTALLATION.

3.3. MAINTAIN UNIFORM FOUNDATION ALONG BARREL OF PIPE WITH SUFFICIENT RELIEF FOR JOINT CONNECTIONS. MAKE BELL HOLES BEFORE LAYING BELL AND SPIGOT PIPE IN PIPE ZONE.

3.4. DO NOT PERMIT FREE FALL BACKFILL MATERIAL THAT MAY DAMAGE PIPE, PIPE FINISH, OR PIPE ALIGNMENT.

4. INSTANTIATION: FOLLOW ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS.
5. ABOVE PIPE ZONE:

5.1. ALL MATERIALS, WORKMANSHIP, COMPACTION, TESTING, AND QUALITY CONTROL SHALL BE IN ACCORDANCE WITH TOOELE COUNTY STANDARD PLANS AND SPECIFICATIONS. SUPPLEMENTARY, AND /OR SUPPORTING DOCUMENTS ARE:

5.1.1. APWA SECTION 33 05 20: BACKFILLING TRENCHES.

5.1.2. APWA SECTION 01 45 00: QUALITY CONTROL.

5.1.3. APWA SECTION 31 25 23: COMPACTION.

6. NOTIFY TOOLE COUNTY ROADS DEPARTMENT FOR ALL "ABOVE PIPE ZONE" INSPECTION AND ACCEPTANCE, ACCORDING TO TOOELE COUNTY REQUIREMENTS.

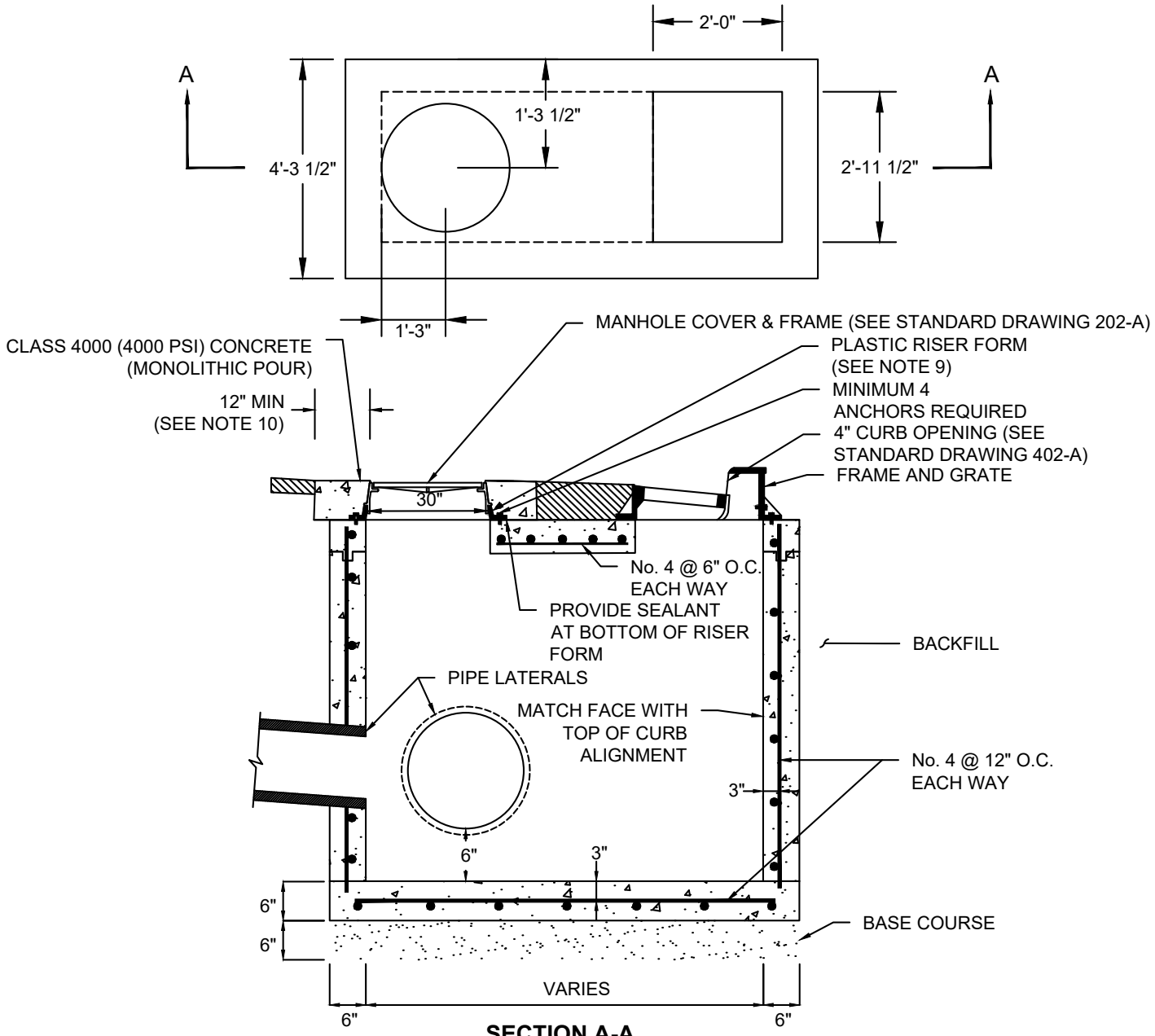
STANDARD DRAWING
401-C
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

STORM DRAIN TRENCH BACKFILL DETAIL

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT

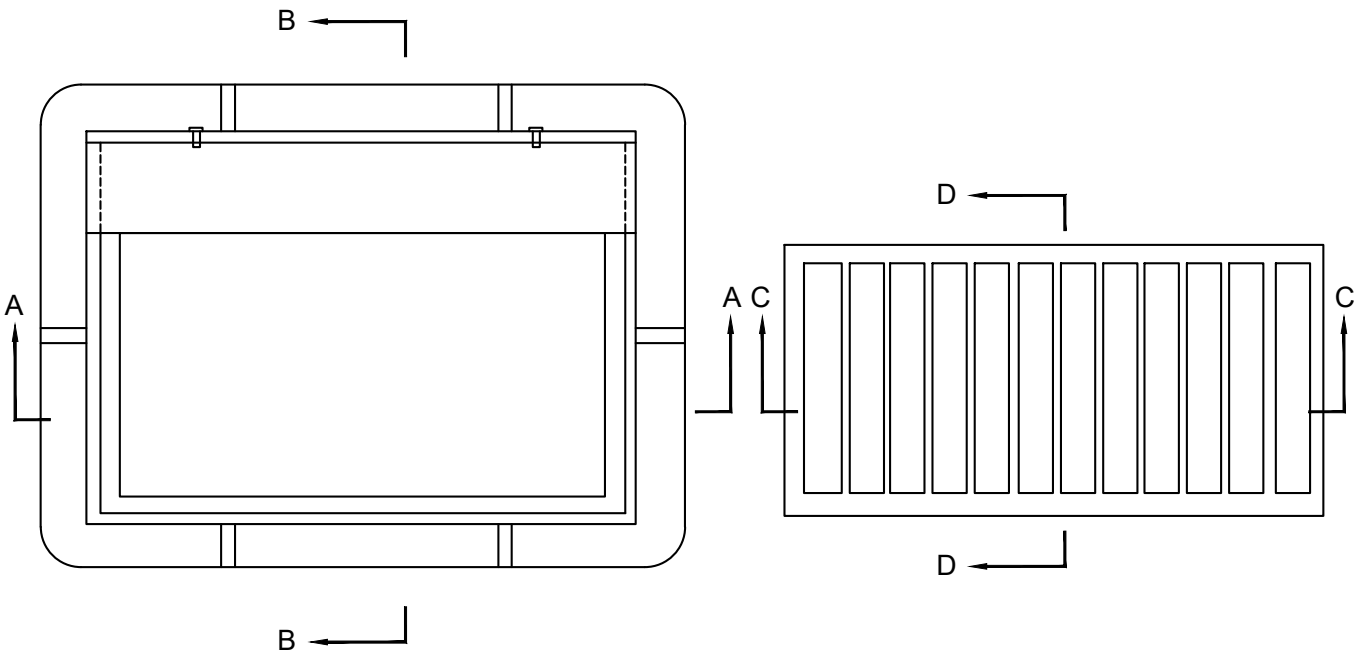


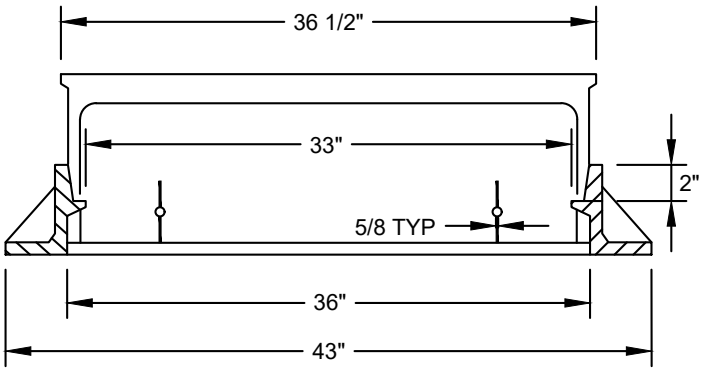
SECTION A-A

NOTES:

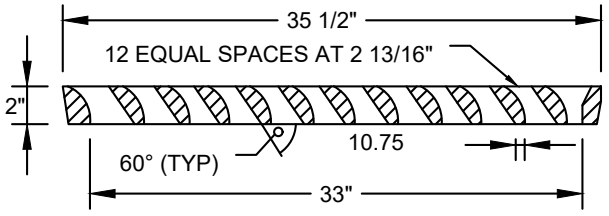
1. THE DRAWING SHOWS TYPICAL PIPE CONNECTIONS. REFER TO CONSTRUCTION DRAWINGS FOR CONNECTION LOCATIONS.
2. CONCRETE: CLASS 4000
3. BACKFILL: COMMON FILL. MAXIMUM PARTICLE SIZE 2-INCHES
4. REINFORCEMENT: DEFORMED , 60 ksi YELD GRADE STEEL, ASTM A615.
5. LADDER RUNGS; PER SPID DRAWING 301-C
6. BASE COURSE PLACEMENT: MAXIMUM LIFT THICKNESS IS 8-INCHES BEFORE COMPACTION. COMPACTION IS 95 PERCENT OR GREATER RELATIVE TO A MODIFIED PROCTOR DENSITY, ASTM D-1557.
7. CONCRETE PLACEMENT: PROVIDE 1/2-INCH RADIUS EDGES. APPLY A BROOM FINISH. APPLY A CURING AGENT.
8. BACKFILL: PROVIDE BACKFILL AGAINST THE ALL BOX WALLS. PEA GRAVEL AND RECYCLED RAP AGGREGATE IS NOT ALLOWED. WATER JETTING IS NOT ALLOWED. COMPACT TO 95% OR GREATER RELATIVE TO MODIFIED PROCTOR DENSITY PER ASTM D-1557, WITH NO LIFT EXCEEDING 8-INCHES.
9. INSTALL WHIRLYGIG MANHOLE RISER COLLAR SYSTEM PER STANDARD DRAWING 202-A.
10. CONCRETE COLLARS ARE REQUIRED FOR ALL PAVED AND NON-PAVED SURFACES.
11. INSCRIPTIONS ON COLLARS REQUIRED. SEE STANDARD DRAWING 404.

STANDARD DRAWING 402 REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	COMBINATION BASIN AND CLEANOUT BOX NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	

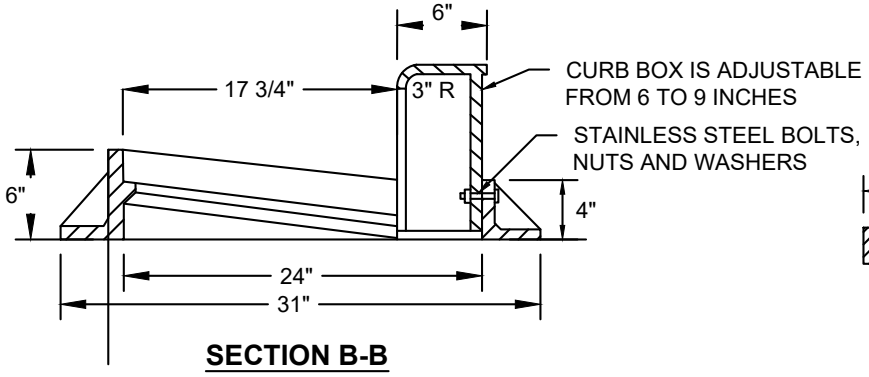




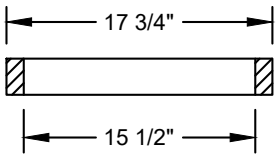
SECTION A-A



SECTION C-C



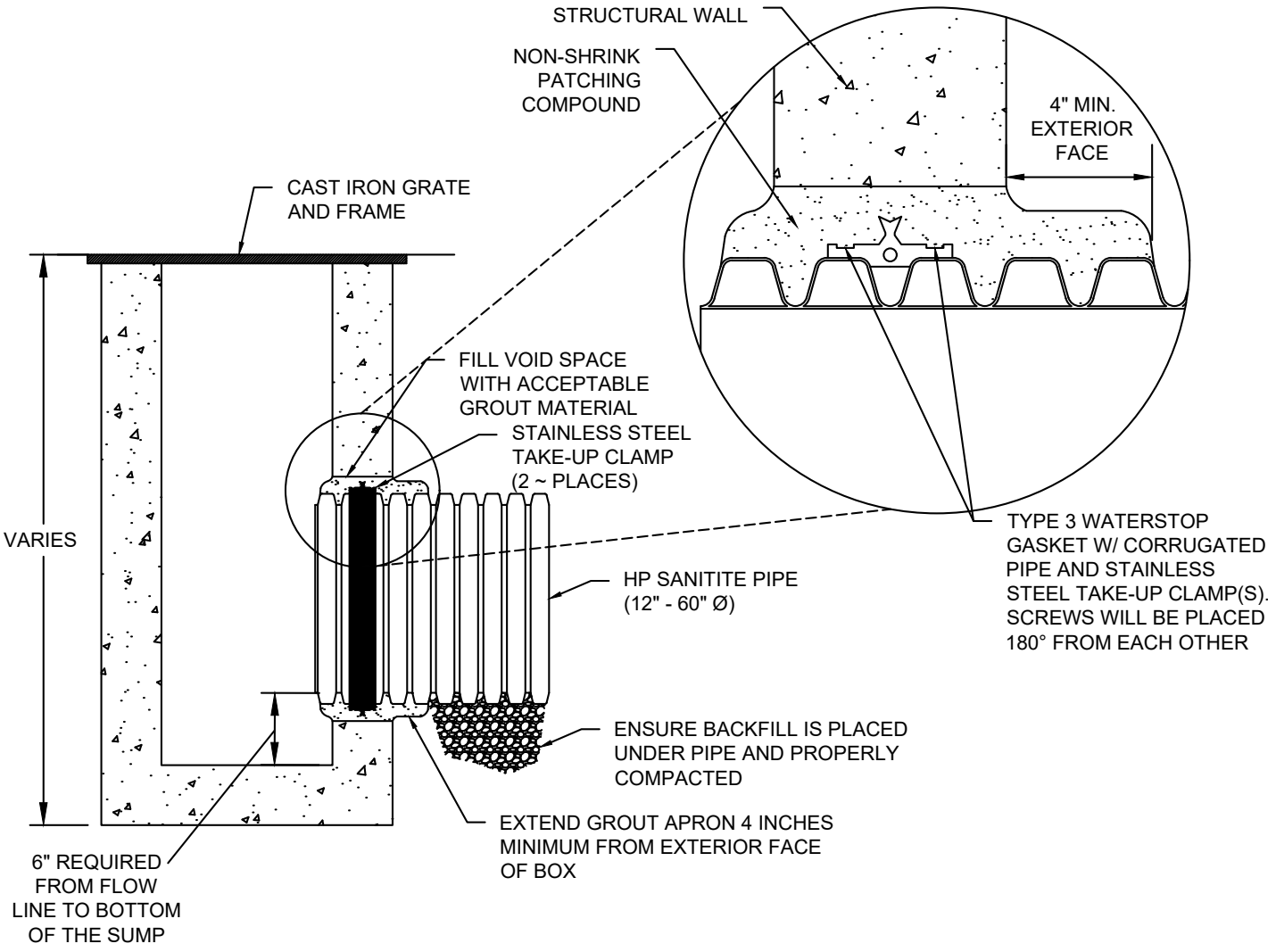
SECTION B-B



SECTION D-D

NOTES:
1. CASTINGS: GREY IRON CLASS 35 MINIMUM PER ASTM A48, COATED WITH ASPHALT BASED PAINT OR BETTER.
2. BOLTS, NUTS, WASHERS, ACCESSORIES: STAINLESS STEEL

STANDARD DRAWING 402-A REV.: 05-14-2026 Brendan Thorpe P.E. District Engineer	35 1/2" GRATE AND FRAME NOT TO SCALE STANSBURY PARK IMPROVEMENT DISTRICT	



REQUIRED CONNECTION AS RECOMMENDED BY THE MANUFACTURER WHEN CONNECTING HP SANITITE PIPE TO STORM DRAIN MANHOLES, BOXES, CATCH BASINS, ETC.

NOTES:

1. PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST INSURE MANHOLE GASKET IS UNIFORMLY SEATED. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND THE MANHOLE.
2. BOLTS, NUTS, WASHERS, ACCESSORIES: STAINLESS STEEL
3. INSTALL PER MANUFACTURER'S STANDARD SPECIFICATIONS AND RECOMMENDATIONS.
4. REFER TO MANUFACTURE'S "ADS" CONNECTION FOR PIPE TO STRUCTURE HOLE RELATIONSHIPS, AND MANUFACTURE'S PRODUCT CODE REFERENCE.

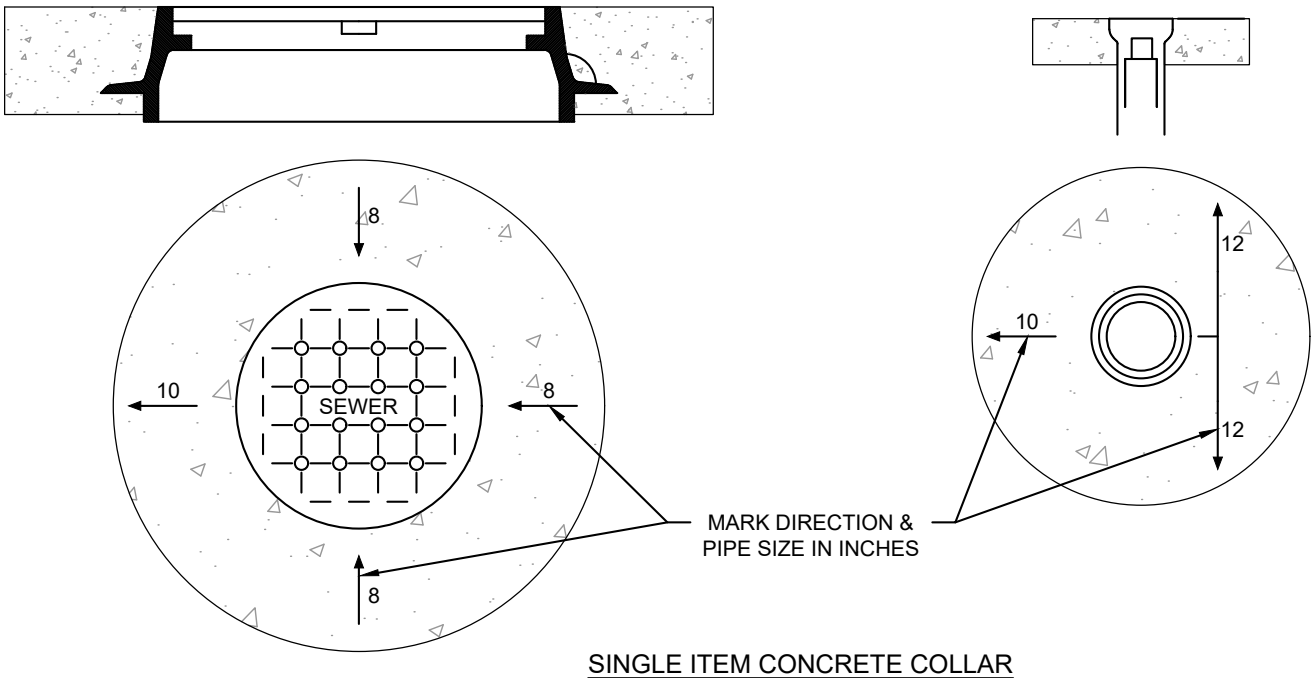
STANDARD DRAWING
403
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

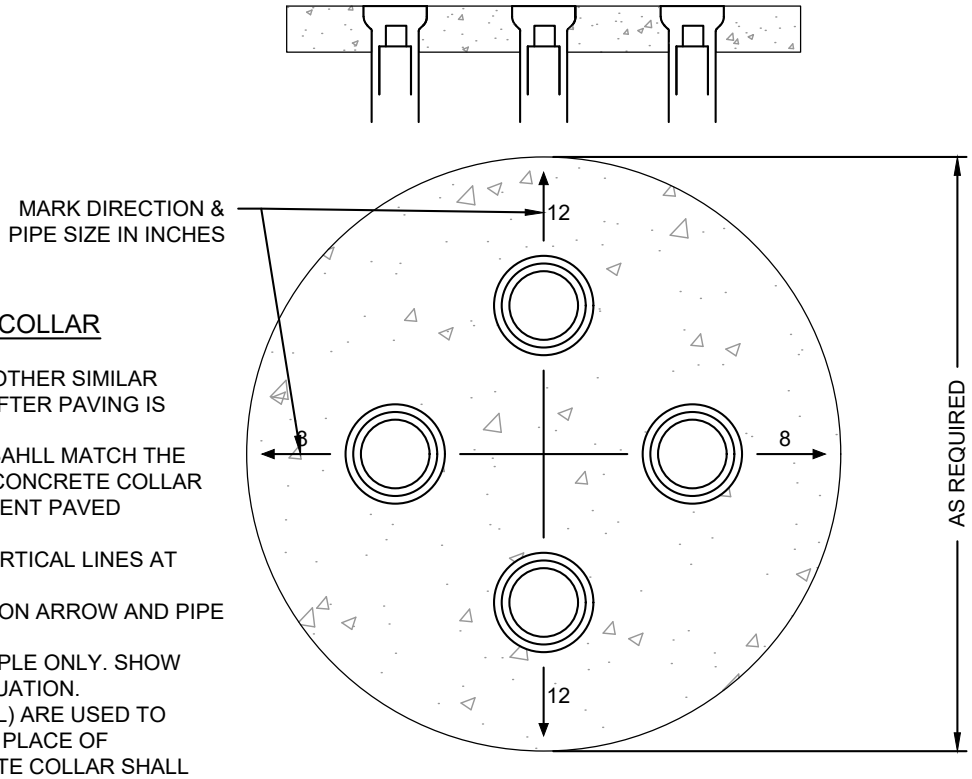
HP SANITITE STORM DRAIN PIPE CONNECTION

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT



SINGLE ITEM CONCRETE COLLAR



MULTIPLE ITEM CONCRETE COLLAR

NOTES:

1. NEW AND EXISTING VALVE BOXES, AND OTHER SIMILAR ITEMS SHALL BE ADJUSTED TO GRADE AFTER PAVING IS COMPLETE
2. THE SURFACE OF THE ADJUSTED RING SAHLL MATCH THE GRADE OF THE CONRETE COLLAR. THE CONCRETE COLLAR SHALL BE 1/4" TO 3/8" BELOW THE ADJACENT PAVED SURFACE.
3. ASPHALT SHALL BE CUT IN STRAIGHT VERTICAL LINES AT COLLAR EDGES.
4. MARK CONCRETE COLLAR WITH DIRECTION ARROW AND PIPE SIZE IN INCHES
5. SIZES AND CONFIGURATIONS FOR EXAMPLE ONLY. SHOW ACTUAL CONFIGURATION FOR EACH SITUATION.
6. WHERE WHIRLYGIG SYSTEMS (OR EQUAL) ARE USED TO BRING MANHOLE COLLARS TO GRADE IN PLACE OF CONCRETE GRADE RINGS, THE CONCRETE COLLAR SHALL EXTEND ALL THE WAY TO THE CONE OR HIGHEST MANHOLE SECTION.

STANDARD DRAWING
404
REV.: 05-14-2026

Brendan Thorpe P.E.
District Engineer

UTILITY CONCRETE COLLAR

NOT TO SCALE

STANSBURY PARK IMPROVEMENT DISTRICT