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D

C

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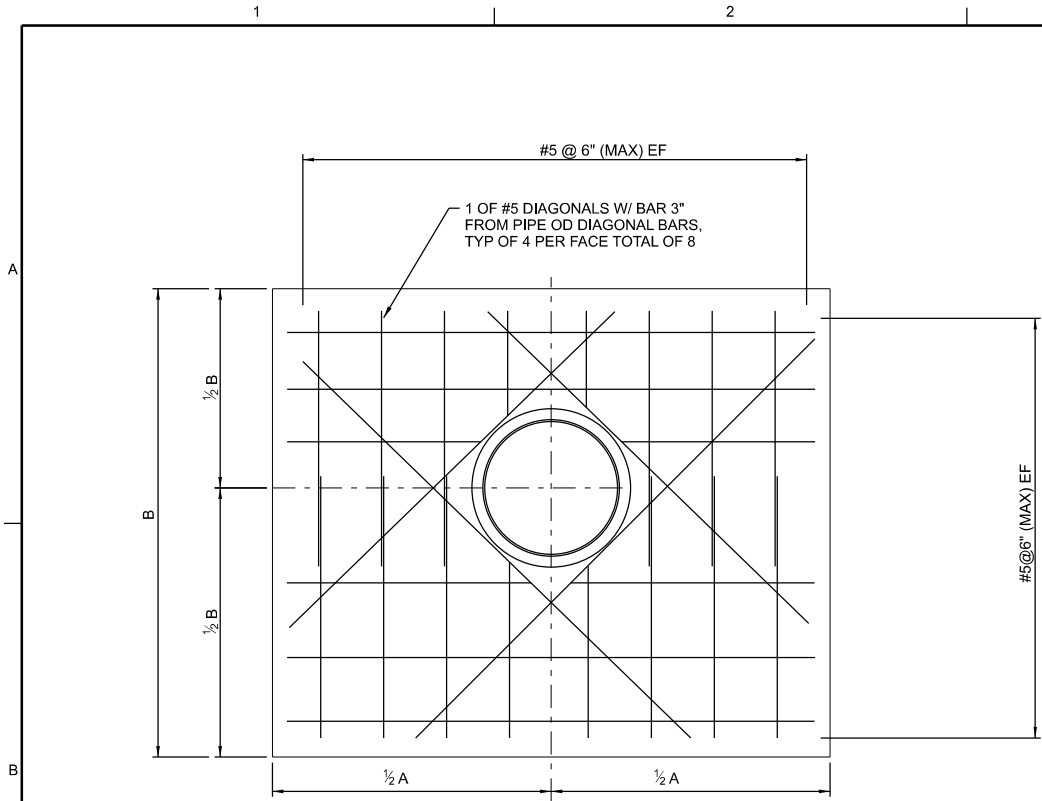


A diagram of a circular loop with a north pole (N) at the top.

[illegible]CITY OF FLORENCE
COVER SHEET

VERIFY SCAL

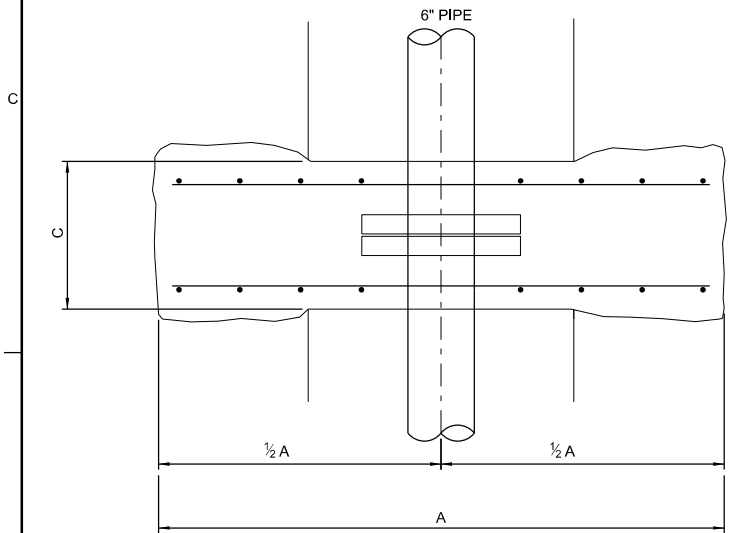
SHEET	1 of 4
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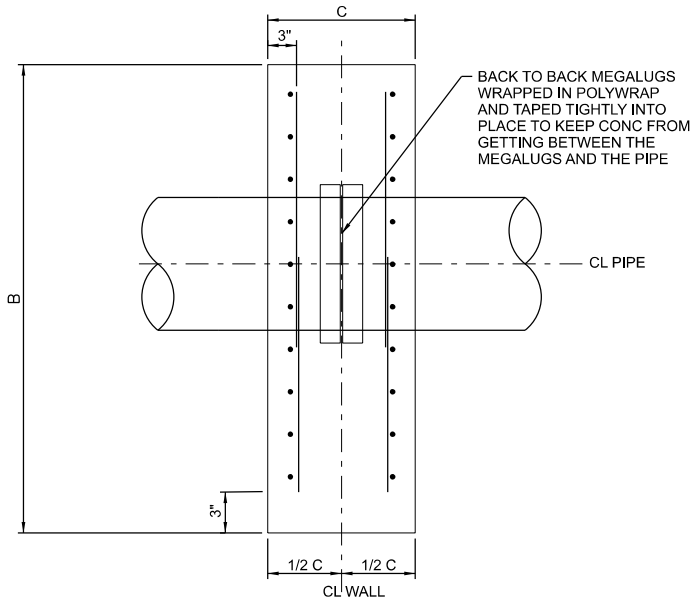
WALL ELEVATION

CONCRETE THRUST WALL DIMENSIONS			
PIPE (NOMINAL)	WIDTH A	DEPTH B	THK C
6"	3'-0"	4'-0"	1'-6"

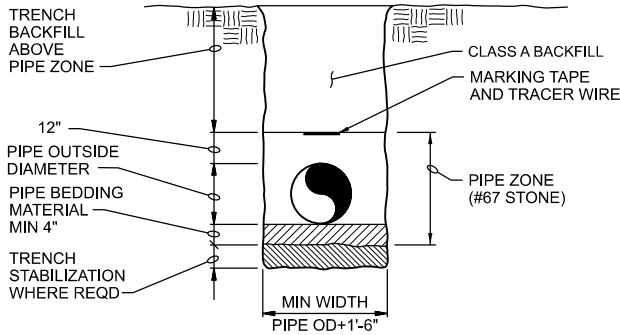
- NOTES:
- THRUST WALL DESIGN PIPELINE TEST PRESSURE: 150 PSI
 - ALLOWABLE SOIL BEARING CAPACITY, INCLUDING SAFETY FACTOR: 1000 PSF.
 - CONCRETE SHALL BE CLASS B ($f_c = 4,500\text{psi}$) PER CDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION (2017), SECTION 601. REINFORCING SHALL BE A615 GRADE 60 ($f_y = 60,000\text{psi}$) PER CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2017), SECTION 602.
 - CONCRETE COVER OVER REBAR SHALL BE 3".
 - BARs ADJACENT TO PIPE SHALL BE 2-INCHES FROM PIPE OD.



CONCRETE THRUST WALL FOR 6-INCH DUCTILE IRON PIPELINE

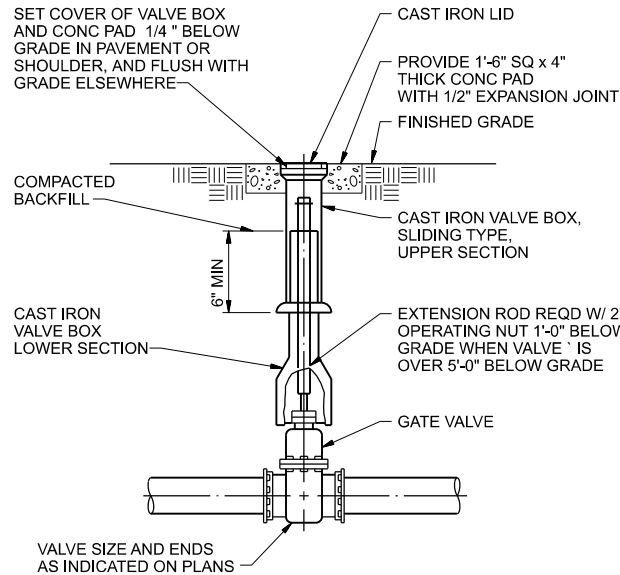


WALL SECTION



- NOTES:
- MINIMUM COVER OVER PIPE TO BE 5' BELOW GRADE.
 - COMPACTED NATIVE BACKFILL TO 90% STD PROCTOR DENSITY IN NON-DRIVING SURFACES.
 - PROVIDE MARKER TAPE AND TRACER WIRE ABOVE PIPE. MARKER TAPE SHALL BE REEF INDUSTRIES, TERRA TAPE (OR EQUAL) NONDETECTABLE WITH MINIMUM THICKNESS 5 MILS AND 6-INCHES IN WIDTH. TRACER WIRE SHALL BE MANUFACTURED BY COPPERHEAD INDUSTRIES (OR EQUAL) AND MATERIAL SHALL BE MINIMUM 12-GAUGE SOLID COPPER OR COPPER JACKET WITH A STEEL CORE.

2 TYPICAL TRENCH



- NOTES:
- CARE TO BE TAKEN WHEN INSTALLING VALVES ON LINES TO ASSURE PROPER SUPPORT OF THE VALVES.
 - 3/4" WASHED ROCK TO BE PLACED UNDER GATE VALVES TO PROVIDE PROPER SUPPORT AS SHOWN.

3 BURIED GATE VALVE BOX

1 THRUST WALL DETAIL



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Jacobs
CITY OF FLORENCE
EAST FLORENCE VAULT
DETAILS

NTS
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE SEPTEMBER 2026
PROJ D4074400
DWG D-2
SHEET 3 of 4

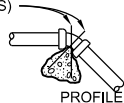
THRUST BLOCK NOTES

1. KEEP CONCRETE CLEAR OF JOINT AND JOINT ACCESSORIES.
2. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
3. REQUIRED VOLUMES OR BEARING AREAS AT FITTINGS SHALL BE AS INDICATED BELOW, ADJUSTED, IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES).
4. THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 PSIG AND THE WEIGHT OF CONCRETE = 4050 LBS/CU YD. TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: $VOLUME = (TEST\ PRESS./150) \times (TABLE\ VALUE)$.
5. BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 150 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 LBS/SQ FT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, MULTIPLY TABLE VALUES BY THE FACTOR $(13.33)(P'/S_b)$, WHERE:
 $P' =$ ACTUAL TEST PRESSURE, PSIG
 $S_b =$ ACTUAL SOIL BEARING PRESSURE, PSF.
6. THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUSTS SHALL BE THE SAME AS FOR HORIZONTAL BENDS.
7. BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS STANDARD
8. BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SQ FT.
9. VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CUBIC YARDS REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS FOR VOLUMES SHOWN TO LEFT OF SOLID LINE IN TABLE.
10. ALLOWABLE SOIL BEARING STRESS IS 2000 LBS/SQ FT.

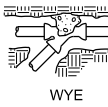
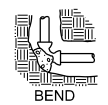
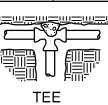
BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)								VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS)			
FITTING SIZE	TEE, WYE, PLUG, OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED RUN		BEND ANGLE			FITTING SIZE	BEND ANGLE		
			A ₁	A ₂	45°	22 1/2°	11 1/4°		45°	22 1/2°	11 1/4°
			4	1.0	1.4	1.9	1.4	1.0	-	-	4
6	2.1	3.0	4.3	3.0	1.6	1.0	-	6	2.7	1.0	0.4
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0	8	4.0	1.5	0.6
10	5.9	8.4	11.8	8.4	4.6	2.4	1.2	10	6.0	2.3	0.9
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7	12	8.5	3.2	1.3
14	11.5	16.3	23.0	16.3	8.9	4.6	2.3	14	11.5	4.3	1.8
16	14.8	21.2	28.6	21.2	11.3	5.8	2.8	16	14.8	5.6	2.3

FITTING SIZE	ROD SIZE	EMBEDMENT
12" AND LESS	#6	30"
14"-16"	#8	36"

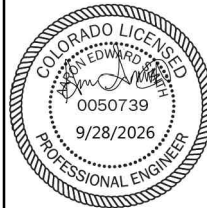
GALVANIZED RODS OVER FITTING AND
EMBEDDED IN CONCRETE (SEE TABLE
FOR SIZES)



* EACH AREA (A/2) IS 1/2 OF
TABULATED TOTAL AREA



1 THRUST BLOCK NOTES AND DETAILS



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CITY OF FLORENCE
EAST FLORENCE VAULT
DETAILS

NTS

VERIFY SCALE

BAR IS ONE INCH ON
ORIGINAL DRAWING.

DATE	SEPTEMBER 2026
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