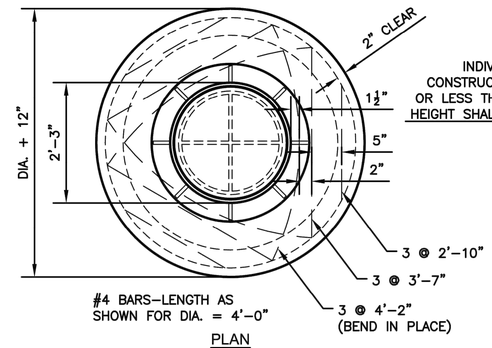
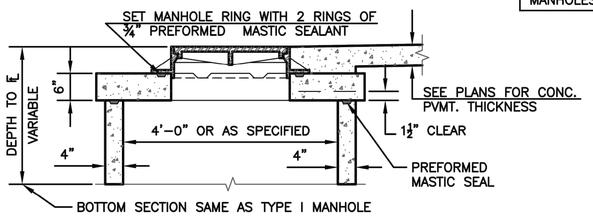


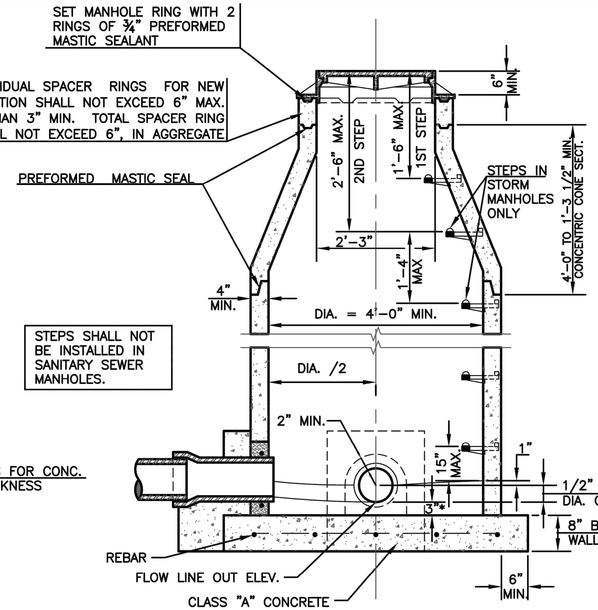
#4 BARS–LENGTH AS SHOWN FOR DIA. = 4'-0"

PLAN



TOP SECTION

STANDARD MANHOLE TYPE II

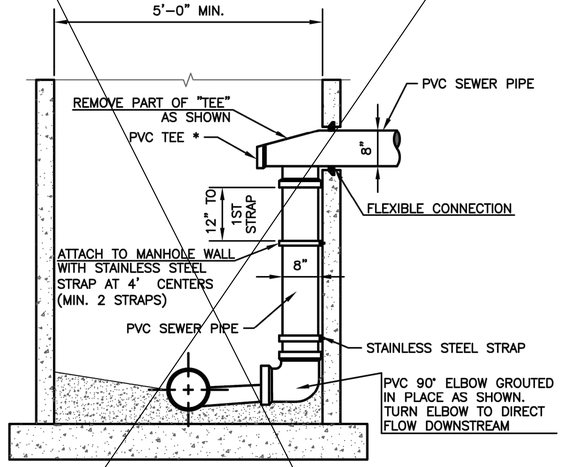


STEPS SHALL NOT BE INSTALLED IN SANITARY SEWER MANHOLES.

NOTE: THE BOTTOM SECTION OF ALL CAST–IN–PLACE MANHOLES AND PRECAST MANHOLES NOT BUILT MONOLITHICALLY WITH THE BASE SHALL BE SET INTO A STEEL REINFORCED (#4 @ 12" E.W.) CONCRETE BASE (4,000 PSI) A MINIMUM OF 4 INCHES. IN THIS CASE, THE BASE THICKNESS SHALL BE INCREASED TO 12 INCHES.

PRE-CAST STANDARD MANHOLE TYPE I

NOTES:
1. STAINLESS STEEL STRAPS (11 GAUGE – .1196") THICK x 1 1/2" WIDE SHALL BE COMPLETELY AROUND THE PIPE AND ATTACHED TO MANHOLE WALL WITH STAINLESS STEEL BOLTS AND ANCHORS. BOLTS SHALL BE 3/8" DIA. x 2" MIN. LENGTH AND ANCHORS SHALL BE 3/8" INSIDE DIA. x 2 1/4" LENGTH. HOLE SHALL BE DRILLED INTO MANHOLE WALL TO A DEPTH OF 2–1/2" AND LARGE ENOUGH IN DIA. TO ACCEPT ANCHORS.
2. THIS DETAIL IS VALID ONLY FOR A SINGLE 8" INSIDE DROP IN A 5' DIA. MANHOLE, RECEIVING AN 8" DIA. SEWER. A SPECIAL DETAIL IS REQUIRED FOR ANY OTHER CONDITIONS.



INSIDE DROP-TYPE A

NOTE: INSIDE DROP–TYPE A IS REQUIRED WHEN FLOWLINE IN AND FLOWLINE OUT ELEVATIONS DIFFER BY 1.0' OR MORE.
* A BOWL SYSTEM BY RELINER/DURAN INC. MAY ALSO BE USED.

DETAIL OF MANHOLE CASTINGS

CASTINGS SHALL CONFORM TO THE REQUIREMENTS OF "SPECIFICATIONS FOR GRAY IRON CASTINGS" IN ACCORDANCE WITH A.S.T.M. A 48, CLASS 35B.

MINIMUM TENSILE STRENGTH OF EACH CASTING SHALL BE AT LEAST 30,000 PSI.

AVERAGE WT. COVER 185 LBS., RING 220 LBS. VARIATION IN WEIGHT WILL NOT EXCEED THE SPECIFIED WEIGHTS BY MORE THAN 4%.

CASTINGS ARE TO BE MANUFACTURED TRUE TO PATTERN AND WITH SATISFACTORY FIT OF COMPONENT PARTS. CASTINGS SHALL BE FREE OF DEFECTS. DIMENSIONS AS DETAILED ON PLAN SHALL NOT DEVIATE BY MORE THAN 1/16" PER FOOT.

SEATING SURFACES OF CASTINGS SHALL BE MACHINED AS REQUIRED TO PREVENT ROCKING.

ALL CASTINGS SHALL BE FURNISHED IN BARE METAL AND SHALL HAVE MANUFACTURER'S NAME CAST INTO CASTING.

CASTINGS SHALL CONFORM TO THE PROVISIONS OF UNITED STATES CUSTOMS REGULATIONS. CASTING MANUFACTURER SHALL CARRY AT LEAST $3,000,000 PRODUCT LIABILITY INSURANCE.

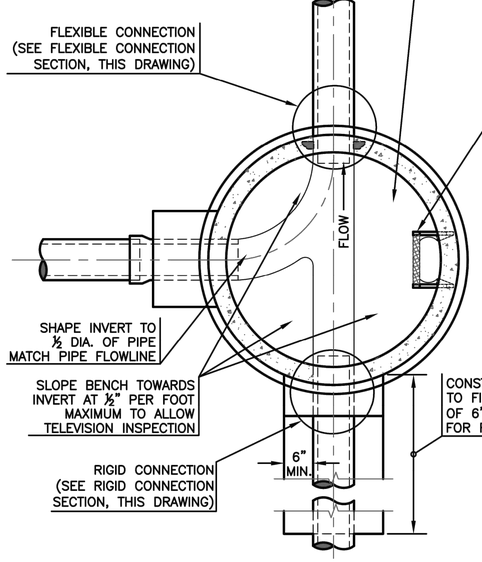
TO INSURE CONFORMANCE TO TENSILE STRENGTH REQUIREMENTS, THE FOLLOWING PROCEDURE WILL BE FOLLOWED FOR EACH LOT OF CASTINGS USED ON CITY OF TOPEKA PROJECTS.

A. ALL CASTINGS SHALL BE JULIAN HEAT DATED.

B. TWO TEST BAR SPECIMENS MUST BE POURED WHEN PRODUCING CITY OF TOPEKA CASTINGS. TEST BAR SPECIMENS SHALL BE DELIVERED TO PURCHASER.

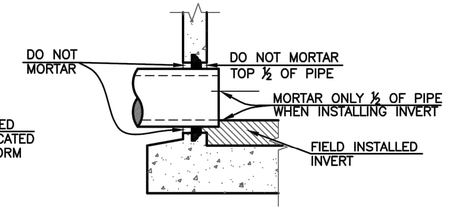
C. TEST REPORT FROM A CITY APPROVED INDEPENDENT LABORATORY VERIFYING TENSILE STRENGTH CHEMISTRY OR BRINELL HARDNESS SHALL ACCOMPANY EACH SHIPMENT OF CASTINGS. IF REQUESTED TEST REPORT SHALL BE PAID FOR BY THE SUPPLIER. THE HEAT DATE(S) ON CASTINGS SHALL CORRESPOND TO THE TENSILE STRENGTH REPORT(S).

PIPE CUT TO SECTION REQUIRED TO BE USED FOR CHANNEL THRU MANHOLE OR A NEATLY FORMED CHANNEL CONFORMING TO SECTION OF PIPE MAY BE USED.



MANHOLE BOTTOM PLAN

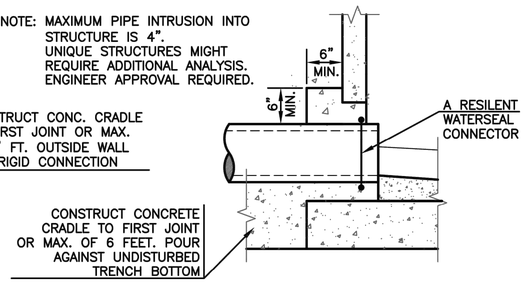
NOTE: DEADEND MANHOLES SHALL HAVE A POURED INVERT. MUST USE BOND BREAKER BETWEEN INVERT AND FLOOR.



FLEXIBLE CONNECTION SECTION

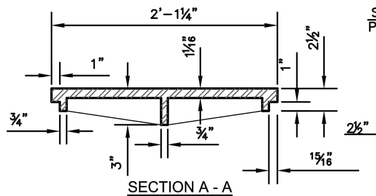
FLEXIBLE CONNECTIONS SHALL BE USED FOR ALL SEWER PIPE TYPES.

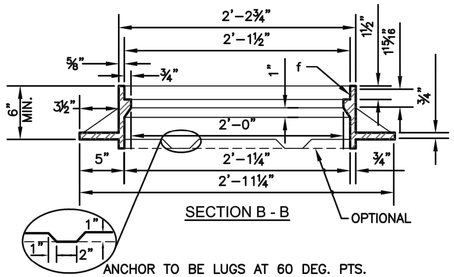
NOTE: MAXIMUM PIPE INTRUSION INTO STRUCTURE IS 4". UNIQUE STRUCTURES MIGHT REQUIRE ADDITIONAL ANALYSIS. ENGINEER APPROVAL REQUIRED.



RIGID CONNECTION SECTION

RIGID CONNECTIONS SHALL BE USED FOR CERTAIN EXISTNG MANHOLE CONNECTIONS AT ENGINEER'S DISCRETION.





ANCHOR TO BE LUGS AT 60 DEG. PTS. OR SOLID RING AROUND PERIMETER.

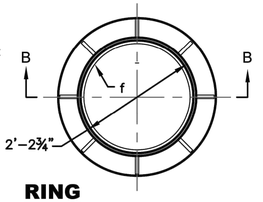
MANHOLE CONSTRUCTION NOTES

ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.

TOP OF 8" FLOOR SLAB TO BE 3" MIN. BELOW FLOW LINE ELEV. OF THE OUTLET PIPE TO INSURE SUFFICIENT MIN. THICKNESS OF SHAPED INVERT.

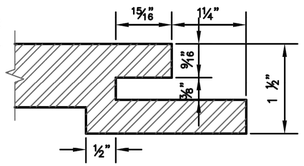
ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO A.S.T.M. DESIGNATION C478

COVER

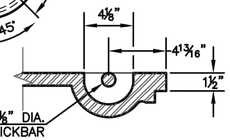


RING

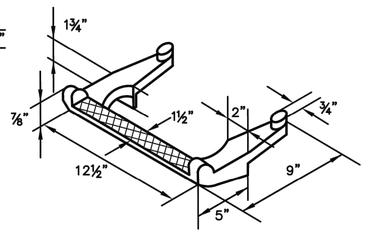
"CITY OF TOPEKA SANITARY SEWER" CAST IN 2½" BLOCK LETTERS AROUND CIRCUMFERENCE OF ALL COVERS INTENDED FOR WASTE WATER USE OR "CITY OF TOPEKA STORMWATER" IF INTENDED FOR STORMWATER USE



CONCEALED PICKSLOT DETAIL



SURFACE PICKSLOT



DETAIL OF CAST IRON MANHOLE STEP

(FOR PRECAST MANHOLE TO BE USED IN STORM SEWER SYSTEMS ONLY)

VESTAL MANUFACTURING NO. 918–P, CLAY AND BAILEY NO. 2115, NEENAH NO. R–1981–I OR EQUAL AS FURNISHED BY MANUFACTURER OF PRECAST MANHOLE.

COPOLYMER POLYPROPYLENE PLASTIC STEP, PS1–PF or PS2–PF, MANUFACTURED BY M.A. IND. INC. OR APPROVED EQUAL MAY BE USED AS AN ALTERNATE TO DETAILED CASTING. THIS STEP MAY BE CAST IN PLACE OR INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURE.

NO.	DATE:	REVISION	BY:	APP'D
5	June 2018	Ext pipe into MHs, Added max intr note	DHS	JVH
4	March 2014	Added rebar to cast–in–place base dwg	DHS	JH
3	March 2013	Cleaned up text at Pre–Cast MH detail	DHS	SB
2	Dec. 2009	Mod. drop notes & added Storm. to MH	DHS	SB
1	Feb. 2008	Mod. MH Bot. Plan, Rigid Sect.& Inside Dr.	DHS	SB

DRAWN BY: rm/mc

APP'D BY: R. Christopher Kemp

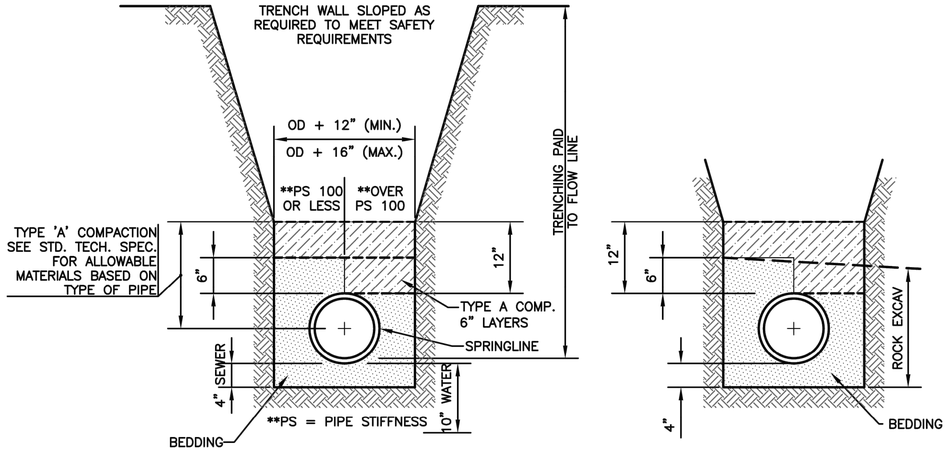
SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702

TOPEKA Public Works ENGINEERING
620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
Phone: (785) 368-3842 • Fax: (785) 368-3881

STANDARD DETAILS

STANDARD MANHOLE DETAILS
(DT-005)

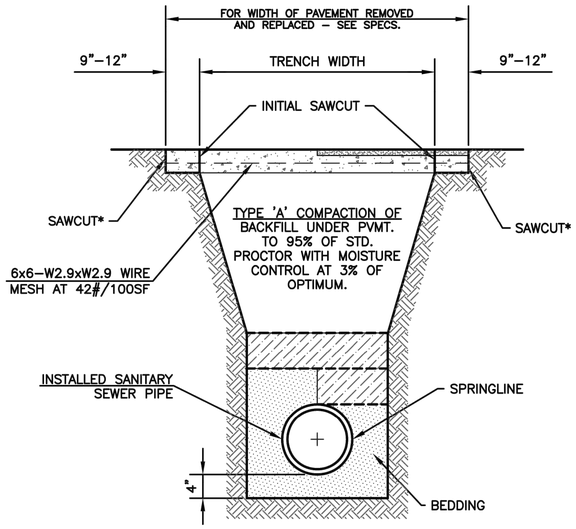
DATE: FEBRUARY 2026
SHEET: 17 OF 36
PROJ.: 841201.02
221114-000



TRENCHING DETAILS

STANDARDS FOR SETTING LINE AND GRADE FOR SEWER & WATER CONSTRUCTION:

1. STAKES, SPIKES, SHINERS, OR CROSSES SET BY TRANSIT AT THE SURFACE ON AN OFFSET FROM THE SEWER CENTER LINE.
2. STAKES ARE TO BE SET IN THE TRENCH BOTTOM ON THE SEWER LINE AS THE ROUGH GRADE FOR SEWER IS COMPLETED.
3. ELEVATIONS GIVEN FOR THE FINISHED TRENCH GRADE AND SEWER INVERT, WHILE SEWER LAYING PROGRESSES.



INSTALLATION OF SEWER UNDER EXISTING PAVEMENT

STANDARD METHODS FOR TRANSFERRING LINE AND GRADE TO SEWER TRENCH BOTTOM:

1. ELECTRONIC LASER EQUIPMENT–STAKING SHALL BE AT 25' INTERVALS FOR THE FIRST 100' AND EVERY 100' THEREAFTER UNTIL THE NEXT MANHOLE IS REACHED.
2. BATTER BOARDS AND BATTER BOARD SUPPORTS–STAKING SHALL BE EVERY 25'.

PAVEMENT PLACEMENT SCHEDULE

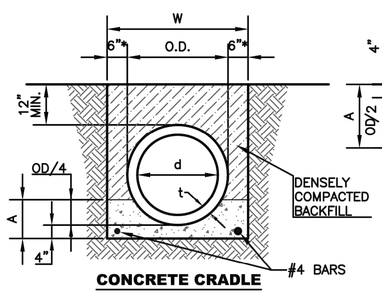
SCHEDULE TO BE USED UNLESS OTHERWISE NOTED ON PLANS.

ORIGINAL SURFACE	NEW PAVEMENT
CONCRETE	8" REINFORCED CONCRETE 4,000psi
BRICK OVER CONCRETE	7" REINFORCED CONC.BASE 4,000psi PLUS ONE–COURSE RELAID BRICK.
ASPHALT	MATCH EXISTING PAVEMENT THICKNESS WITH A MINIMUM OF 6" HOT–MIX ASPHALTIC CONCRETE.
ASPHALT OVER CONCRETE	7" REINFORCED CONCRETE BASE 4000 psi PLUS 2" HOT MIX ASPHALTIC CONCRETE. 7" REINFORCED CONCRETE BASE SHALL BE JOINED TO ADJACENT PAVEMENT. SEE "FULL PANEL REPAIR & UTILITY CUTS FOR CONCRETE PAVEMENT" DETAIL AS SHOWN ON MISCELLANEOUS DETAILS I (DT–017). THE WEARING SURFACE WILL CONFORM TO CITY/COUNTY STANDARD SPECIFICATIONS.
BRICK OVER BRICK/SUBGRADE	7" HOT–MIX ASPHALTIC CONCRETE PLUS ONE–COURSE RE–LAID BRICK.
	PAVEMENT SHALL BE SAWED AND REMOVED WITHOUT DAMAGE TO ADJACENT PAVEMENT.

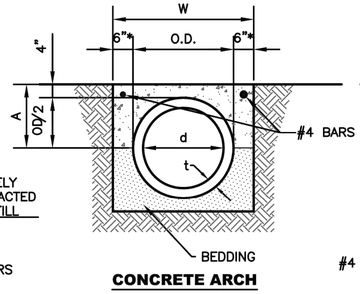
* SECOND PAVEMENT CUT TO BE MADE AND PAVEMENT REMOVED AFTER TRENCH IS PROPERLY BACKFILLED.

** CONCRETE PAVEMENT SHALL BE JOINED TO ADJACENT CONCRETE PAVEMENT AS PER "FULL PANEL REPAIR AND UTILITY CUTS FOR CONCRETE PAVEMENT" AS SHOWN ON MISCELLANEOUS DETAILS I (DT–017).

NOTES:
1. THE TRENCH SHALL BE EXCAVATED TO 4" BELOW BOTTOM OF THE PIPE BARREL & BACKFILLED AS SHOWN ABOVE WITH AN APPROVED BEDDING MATERIAL.
2. WHEN THE SEWER IS TO BE INSTALLED IN ROCK, THE TRENCH IS TO BE EXCAVATED TO A MINIMUM DEPTH OF 4" BELOW THE BOTTOM OF THE PIPE AND BACKFILLED IN 6" COMPACTED LAYERS WITH AN APPROVED BEDDING MATERIAL AS SHOWN. THE ROCK EXCAVATED TO BE PAID AS A SEPARATE BID ITEM. THE EMBEDMENT, IN ALL CASES, TO BE INCLUDED IN THE PRICE BID PER TRENCH, EXCAVATION, AND BACKFILL.

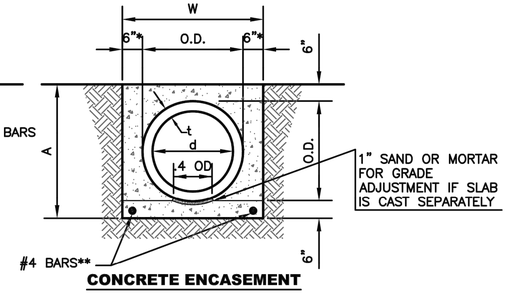


CONCRETE CRADLE



CONCRETE ARCH

*MINIMUM WIDTH



CONCRETE ENCASEMENT

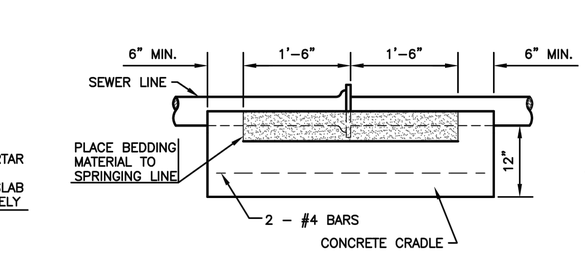
**REINFORCING SHALL BE TWO #4 BARS FOR PIPE UP TO 8" DIA; FOUR #4 BARS FOR 10" THROUGH 24" DIA; AND AS APPROVED BY THE ENGINEER FOR LARGER THAN 24" DIA.

d	O.D.	t	W	CRADLE A		ARCH A		ENCASE. A	
IN.	IN.	IN.	IN.	IN.	CY/FT	IN.	CY/FT	IN.	CY/FT
8	9.50	.750	24	6.4	.036	8.8	.039	21.5	.102
10	11.75	.875	24	6.9	.038	9.9	.047	23.8	.117
12	14	1.00	26	7.5	.043	11.0	.054	26.0	.134
15	17.5	1.25	29.5	8.4	.051	12.8	.066	29.5	.162
18	21	1.50	33	9.3	.061	14.5	.078	33.0	.191
21	24.5	1.75	36.5	10.1	.071	16.3	.093	36.5	.222
24	28	2.00	40	11.0	.085	18.0	.106	40.0	.256
27	31.5	2.25	43.5	11.9	.095	19.8	.121	43.5	.286
30	35	2.50	47	12.8	.106	21.5	.136	47.0	.321
36	41.5	2.75	53.5	14.4	.129	24.8	.167	53.5	.388

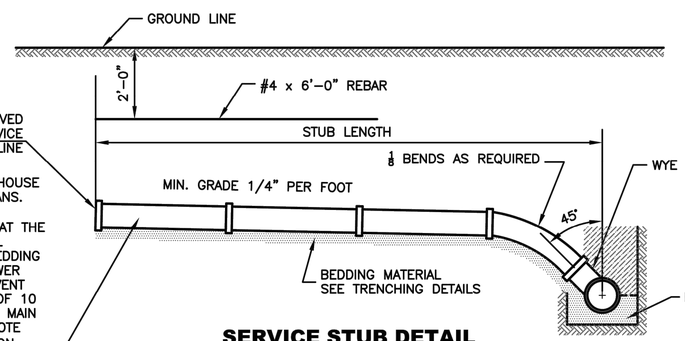
NOTE: MAXIMUM PIPE INTRUSION INTO STRUCTURE IS 4". UNIQUE STRUCTURES MIGHT REQUIRE ADDITIONAL ANALYSIS. ENGINEER APPROVAL REQUIRED.

SCHEDULE FOR CONCRETE CRADLE, CONCRETE ARCH AND CONCRETE ENCASEMENT FOR SANITARY SEWERS

NOTE: MIN. 2500 PSI CONCRETE USED FOR CRADLING.

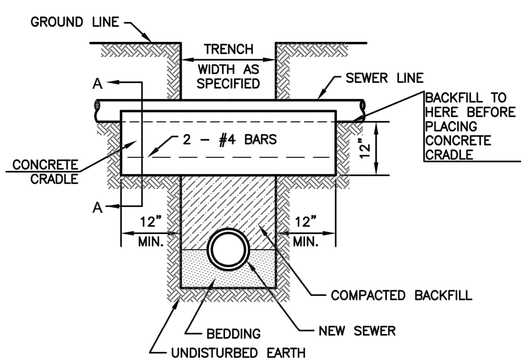


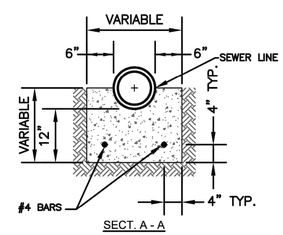
JOINT CRADLE DETAIL



MAXIMUM DEPTH AT PLUG LOCATION SHALL BE 14' BELOW TOP OF HOUSE FOUNDATION. LENGTH AND ELEVATION SHALL BE AS SHOWN ON PLANS. LINES SHALL BE PLACED AT RIGHT ANGLES FROM MAIN. ALIGNMENT CHANGES MUST BE MADE BY THE USE OF 1/8 BENDS CONNECTED AT THE WYE. UNIT PRICE BID PER LINEAL FOOT FOR SERVICE STUBS SHALL INCLUDE – TRENCHING, LAYING, BACKFILLING, PIPE, FITTINGS AND BEDDING MATERIAL. AT POINTS WHERE SEWERS CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON, PLASTIC PIPE WITH SOLVENT WELDED JOINTS, OR PIPE ENCASED IN CONCRETE FOR A DISTANCE OF 10 FEET IN EACH DIRECTION FROM THE CROSSING UNLESS THE WATER MAIN IS AT LEAST 2 FEET ABOVE THE SEWER. FOR SIZING DATA SEE NOTE ELSEWHERE, THIS SHEET. ALSO SEE "SANITARY SEWER CAP" DETAIL ON MISCELLANEOUS DETAILS II (DT–018).

SERVICE STUB DETAIL





CRADLE DETAILS

NO.	DATE:	REVISION	BY:	APP'D
4	June 2018	Added maximum pipe intrusion note	DHS	JVH
3	March 2013	Mod. Pvmt. Place. Sch. & Bedding Amt.	DHS	SB
2	Feb. 2008	Mod. Cradle & Arch and Pvmt. Place Sch.	DHS	SB
1	Dec. 2004	Mod. Serv. Note	DHS	JH

DRAWN BY: rm/mc

APP'D BY: [signature]

SHAWNEE COUNTY, KANSAS
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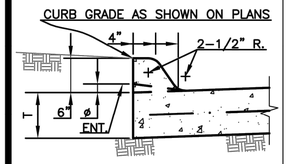
STANDARD DETAILS

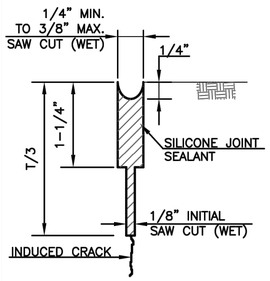
SANITARY SEWER DETAILS
(DT-007)

DATE: FEBRUARY 2026
SHEET: 18 OF 36
PROJ.: 841201.02
221114-000

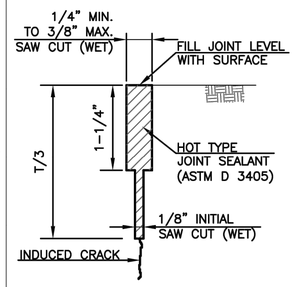


DETAIL A

6" INTEGRAL CURB
ø 1-1/2" FOR DRIVE ENTRANCES AND 3/4" FOR SIDEWALK RAMPS.



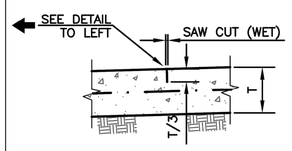
SILICONE JOINT
OPTION 1

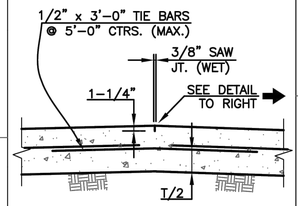


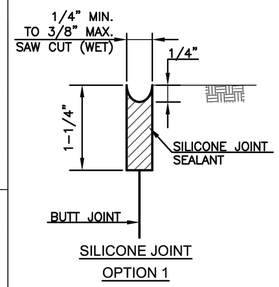
HOT TYPE JOINT
OPTION 2

DETAIL B

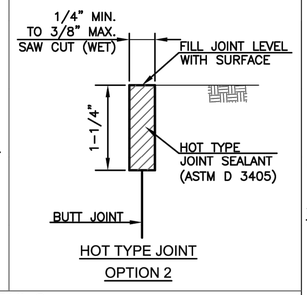
TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS







SILICONE JOINT
OPTION 1

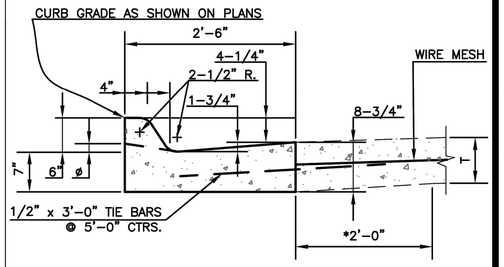


HOT TYPE JOINT
OPTION 2

DETAIL C

TRANSVERSE AND LONGITUDINAL BUTT JOINTS

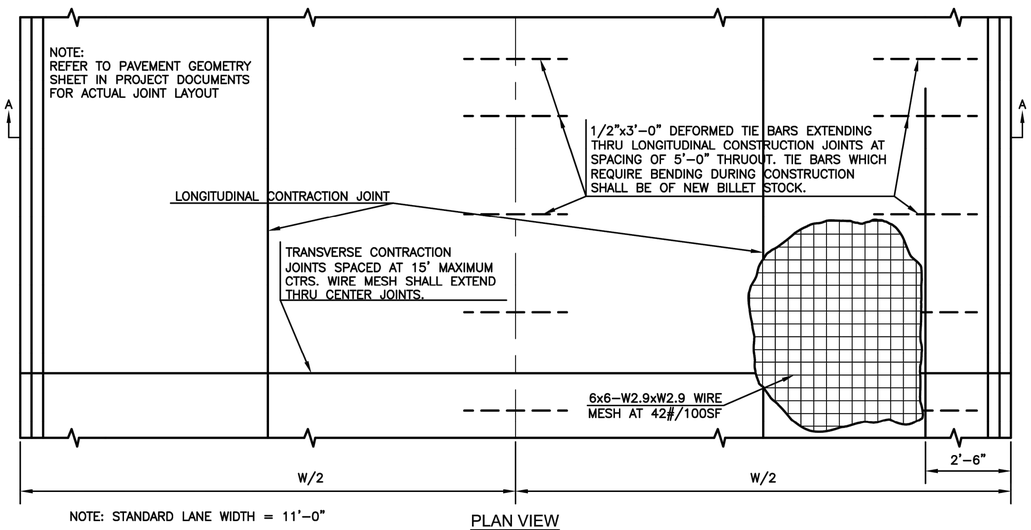
NOTE:
AT THE BEGINNING AND END OF THE PAVEMENT ON ANY GIVEN PROJECT A CONSTRUCTION JOINT AS OUTLINED IN THE STANDARD SPECIFICATIONS AND SHOWN ABOVE SHALL BE USED UNLESS THE PAVEMENT ABUTS A RIGID SURFACE. THE HEADER SHALL BE REMOVED AND THE TIE BARS BENT INTO THE GROOVE AT RIGHT ANGLES TO THE CENTERLINE OF THE PAVEMENT.



DETAIL D

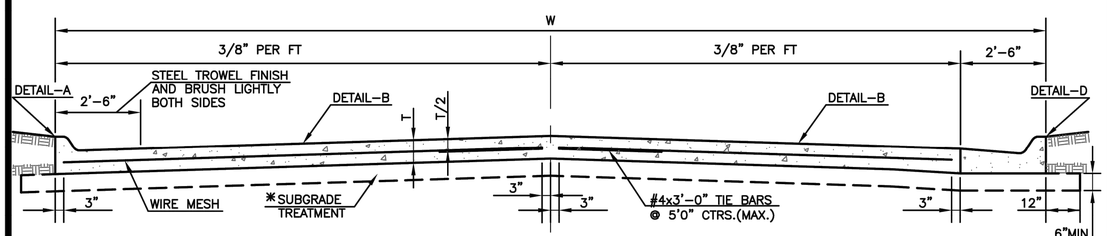
* THE CONTRACTOR HAS THE OPTION OF MAINTAINING T OR TRANSITIONING AS SHOWN AT NO ADDITIONAL COST TO OWNER.

ø 1-1/2" FOR DRIVE ENTRANCES AND 3/4" FOR SIDEWALK RAMPS.



NOTE: STANDARD LANE WIDTH = 11'-0"

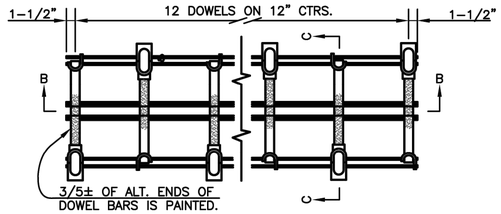
PLAN VIEW



*SUBGRADE TREATMENT PER GEOTECHNICAL REPORT.

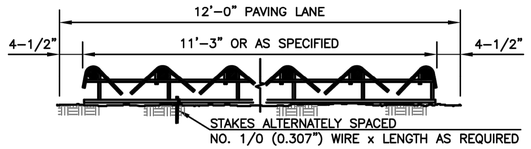
TYPICAL PAVEMENT
SECTION A-A

NOTE:
COMBINED CURB AND GUTTER OR INTEGRAL CURB MAY BE USED WITH CONCRETE PAVEMENT CONSTRUCTION AS DETERMINED BY THE CITY/COUNTY ENGINEER. SEE TYPICAL PAVEMENT SECTION ABOVE.

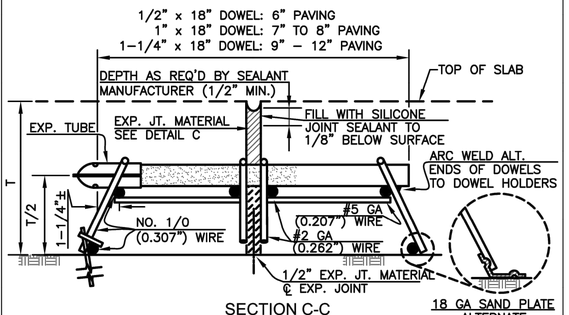


PLAN VIEW OF WELDED
EXPANSION JOINT ASSEMBLY

NOTES:
1. DOWELS, PLAIN ROUND PER A.S.T.M. A-615, GRADE 40 OR AS SPECIFIED.
2. UNIT-WIRED TOGETHER FOR QUICK DISASSEMBLE AND PLACEMENT OF EXPANSION AND FILLER IN FIELD.
3. ALL WIRE SIZES SHOWN ARE MINIMUM. DOWELS, PLAIN ROUND PER A.S.T.M. A-615,GRADE



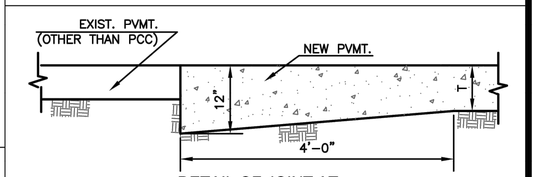
SECTION B-B



SECTION C-C

DETAIL OF LAP
WIRE MESH

NOTE:
THE LAP WIRE SHALL EXTEND BEYOND THE FIRST TRANSVERSE WIRE OF EACH SHEET. THE SHEET SHALL BE WIRED SECURELY AT THE EDGES AND AT INTERVALS NOT TO EXCEED 2'-6" FOR THE FULL WIDTH OF THE SHEET. APPROXIMATE WEIGHT OF WIRE MESH = 42 LBS./100 SQ. FT. OTHER METHODS FOR FASTENING THE SHEETS OF WIRE MESH AT THE LAPS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.



DETAIL OF JOINT AT
EXISTING PAVEMENT

NOTES:
1. SAND IS NOT AN APPROVED FILL OR SUBGRADE MATERIAL.
2. WHERE NEW PAVEMENT ABUTS EXISTING PCC PAVEMENT, THICKENED SECTION SHALL BE ELIMINATED AND 1" DIA. SMOOTH DOWELS SHALL BE PLACED @ 12" CENTERS. THE DOWELS SHALL BE ARRANGED SIMILAR TO THE DETAIL FOR "FULL PANEL REPAIR & UTILITY CUTS" SHOWN ON MISCELLANEOUS DETAILS I (DT-017).

NO.	DATE:	REVISION	BY:	APP'D
6	June 2018	Eliminated sealing butt joint at curb toe	DHS	JVH
5	March 2013	Made bar size " & added ref. to DT-017	DHS	SB
4	Dec. 2012	Changed to tie bars at Detail D	DHS	SB
3	March 2010	Eliminated keyed joint at Typical Section	DHS	SB
2	Dec. 2009	Eliminated keyed joints	DHS	SB
1	Feb. 2008	Mod. Det.'s B,C&D and Sect.'s A-A&D-D	DHS	SB

DRAWN BY: rm/mc

APP'D BY: R. Chassity-King

SHAWNEE COUNTY, KANSAS
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TOPEKA, KS 66618
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620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
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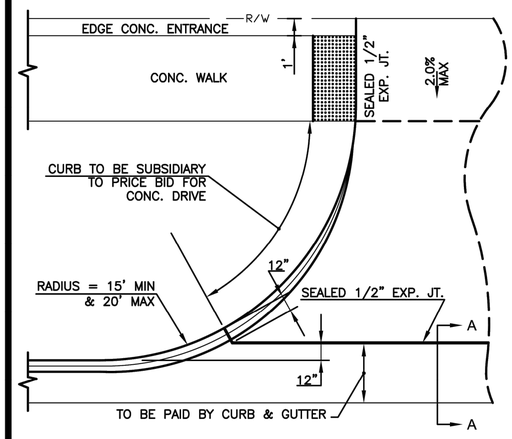
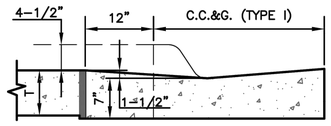
STANDARD DETAILS

CONCRETE PAVEMENT DETAILS
(DT-002)

DATE: JANUARY 2026
SHEET: 19 OF 34
PROJ.: 841201.02
221114-000

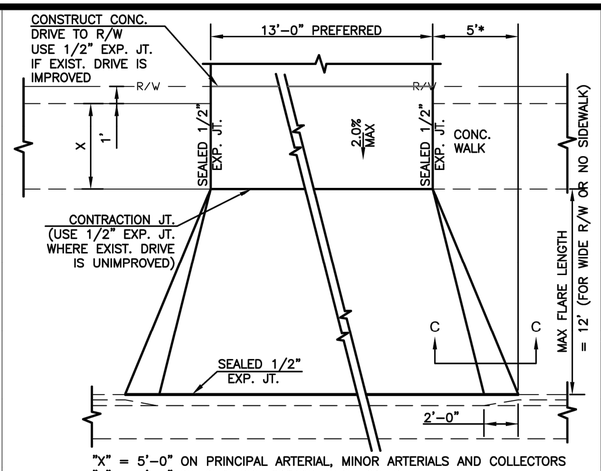


COMMERCIAL DRIVE APPROACH



SECTION A - A

T=8" NON-REINFORCED FOR COMMERCIAL DRIVE, ALLEY APPROACH, AND SIDEWALK IN DRIVE ENTRANCE.



"X" = 5'-0" ON PRINCIPAL ARTERIAL, MINOR ARTERIALS AND COLLECTORS
"X" = 4'-0" ON SUB-COLLECTORS AND LOCALS

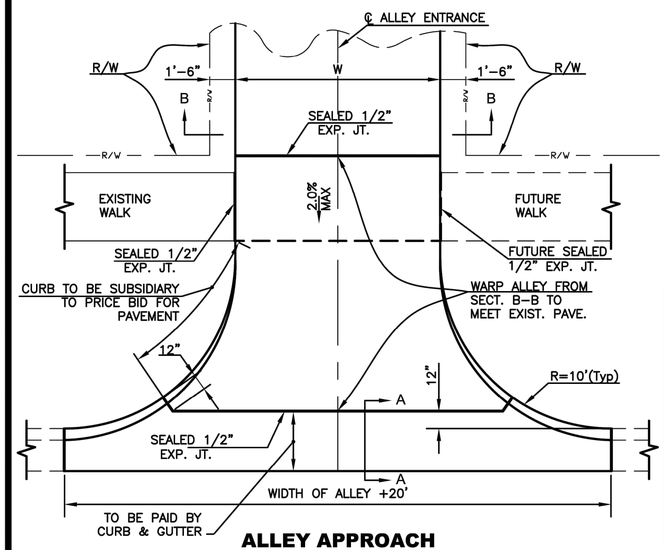
TYPICAL PRIVATE DRIVE APPROACH

NOTES:
1. A SPECIAL DETAIL WILL BE PROVIDED WHEN SIDEWALK IS CLOSER THAN 6'-0" FROM BACK OF CURB.
2. THEORETICAL CURB HEIGHT OF 6" ABOVE ℄ SHALL BE OBTAINED IN ENTRANCE PAVEMENT.

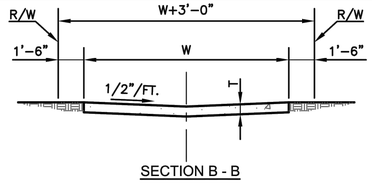
* FLARE SHALL BE 5 FEET WIDE IN NEW CONSTRUCTION. VARIANCES MAY BE MADE WITH APPROVAL OF THE CITY ENGINEER IN SPECIAL CIRCUMSTANCES FOR THE REPLACEMENT OF EXISTING DRIVEWAYS.

SECTION C - C

T1=6" FOR RESIDENTIAL DRIVE APPROACH AND SIDEWALK IN DRIVE ENTRANCE

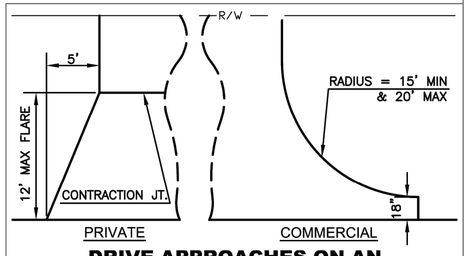


ALLEY APPROACH

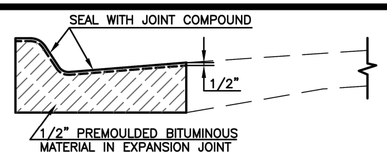


SECTION B - B

NOTES:
1. T=7" REINFORCED CONCRETE
2. WIDTH OF W WILL BE USED THROUGHOUT ON ALL ALLEY PAVING PROJECTS.
3. ALLEY RETURNS SHALL BE THE SAME THICKNESS AS THE ADJACENT STREET THICKNESS.
4. 1/2" EXP. JOINT AT EACH END OF ALLEY RETURN.

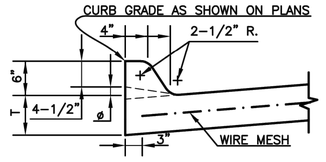


DRIVE APPROACHES ON AN UNIMPROVED ROADWAY

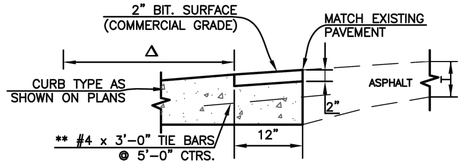


CURB AND GUTTER EXPANSION JOINT DETAILS

NOTES:
1. 1/2" EXPANSION JOINTS TO BE PLACED AT THE END OF ALL INTERSECTION RETURNS.
2. SAND IS NOT AN APPROVED FILL OR SUBGRADE MATERIAL.
3. ALL EXPANSION JOINTS SHALL BE SEALED WITH APPROVED MATERIAL.



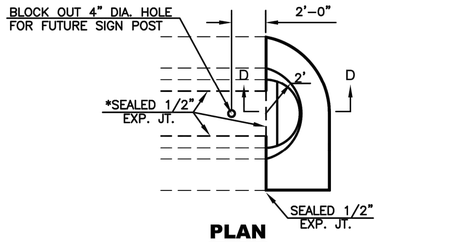
6" INTEGRAL CURB



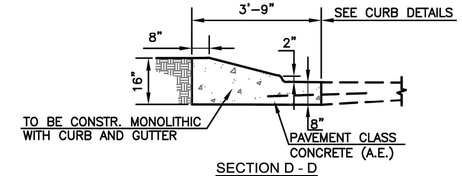
CC&G (MODIFIED)

NOTE:
CURB AND GUTTER ABUTTING EXISTING ASPHALT

△ DIMENSION IS FROM BACK OF CURB TO TOE, SEE APPROPRIATE DETAIL FOR CURB TYPE AS SHOWN ON PLANS



PLAN

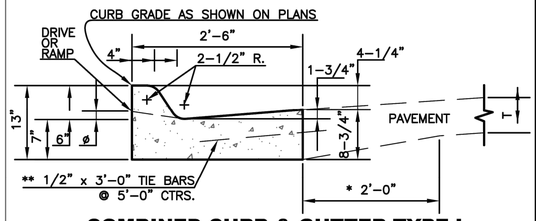


SECTION D - D

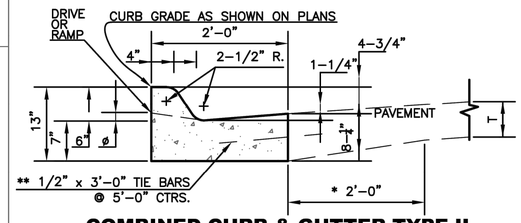
SOLID NOSE DETAILS

NOTE:
PAVEMENT CLASS CONCRETE (AE) NEEDED TO COMPLETE THE MEDIAN NOSE SHALL BE SUBSIDIARY TO THE BID ITEM FOR COMBINED CURB AND GUTTER TYPE III.

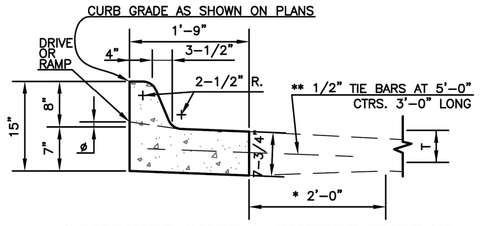
* OMIT SEALED 1/2" EXPANSION JOINT WHEN SURFACE MATERIAL USED IN MEDIAN IS OTHER THAN CONCRETE.



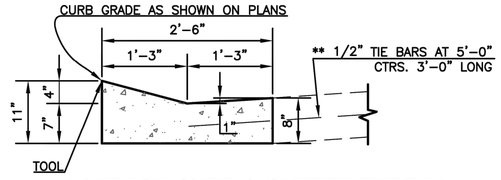
COMBINED CURB & GUTTER-TYPE I



COMBINED CURB & GUTTER-TYPE II



COMBINED CURB & GUTTER-TYPE III



LAYBACK CURB & GUTTER-TYPE IV

NOTES:
1. USE OF LAYBACK CURB AND GUTTER IS RESTRICTED TO STREET CLASSIFICATION OF SUB-COLLECTOR AND LOCAL. LAYBACK CURB AND GUTTER SHALL NOT BE USED IN INTERSECTION CURB RETURNS.
2. FOR CURB AND GUTTER ABUTTING EXISTING ASPHALT, REFER TO CC&G MODIFIED DETAIL

* THE CONTRACTOR HAS THE OPTION OF MAINTAINING OR TRANSITIONING AS SHOWN AT NO ADDITIONAL COST.

**THE TIE BARS MAY BE ELIMINATED WITH ASPHALTIC CONCRETE PAVEMENT CONSTRUCTION.

ø 1-1/2" FOR DRIVE ENTRANCES AND 3/4" FOR SIDEWALK RAMP

NO.	DATE:	REVISION	BY:	APP'D
5	March 2013	C&G payment @ alley appr. & bars to "	DHS	SB
4	Dec. 2012	Changed to tie bar from rebar	DHS	SB
3	March 2010	Eliminated keyed jt. at Com. Drive Appr.	DHS	SB
2	Dec. 2009	Added Dr. Appr. on Unimpr. Rdwy., added flare verbage, mod. S/W x-slope & remv. keyed joints from C & G.	DHS	SB
1	Feb. 2008	Mod. Com. Dr. & Alley Appr.	DHS	SB

DRAWN BY: rm/mc

APP'D BY: [signature]

SHAWNEE COUNTY, KANSAS
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TOPEKA Public Works
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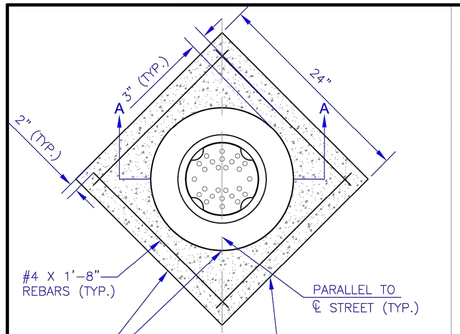
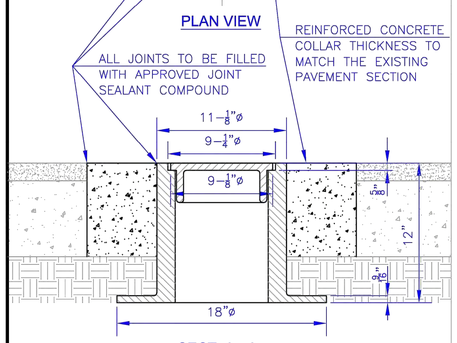
STANDARD DETAILS

CURB & GUTTER AND APPROACH DETAILS
(DT-003)

DATE: JANUARY 2026
SHEET: 20 OF 34
PROJ.: 841201.02
221114-000



PLAN VIEW



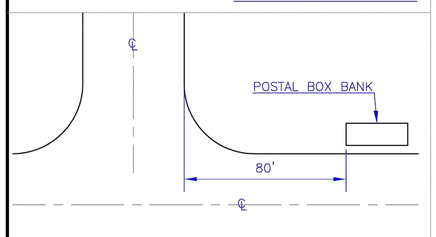
SECT. A - A

NOTES:
1. THE TOP OF THE MONUMENTATION WITHIN THE MONUMENT BOX WILL BE BELOW THE BOTTOM OF THE MONUMENT BOX AND PAVEMENT ELEVATION TO ACCOMMODATE FREE PAVEMENT MOVEMENT WITHOUT DISPLACEMENT OF THE MONUMENT. ALL MONUMENTS IN CONCRETE WILL BE PLACED IN SUCH A WAY THAT THE TOP OF CONCRETE IS A MINIMUM OF 3" CLEAR OF THE BOTTOM OF THE MONUMENT BOX AND PAVEMENT, TO ALLOW DRAINAGE PERCOLATION OF SURFACE SEEPAGE AWAY FROM THE BOX.

2. ALTERNATE INSTALLATION: 24" DIAMETER CORE DRILL CENTERED AROUND THE MONUMENT WITH #4 REBAR HOOPS MAINTAINING A 3" CLEARANCE FROM MONUMENT AND EDGE OF CONCRETE COLLAR.

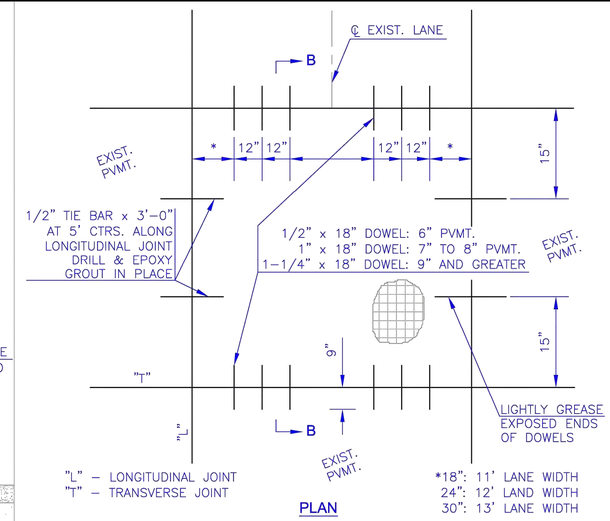
3. CLAY AND BAILEY MFG. CO.
COVER NO. 02193-01-1003
RING NO. 02193-01-2050
COMBINED WEIGHT 95 LBS.

CAST IRON MONUMENT BOX



NOTE:
WHERE BANKS OR GROUPS OF POSTAL BANKS ARE TO BE INSTALLED, THEY SHALL BE A MINIMUM OF EIGHTY (80) FEET FROM THE INTERSECTION BACK OF CURB.

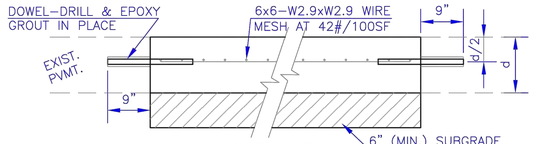
POSTAL BOX BANKS



"L" – LONGITUDINAL JOINT
"T" – TRANSVERSE JOINT

PLAN

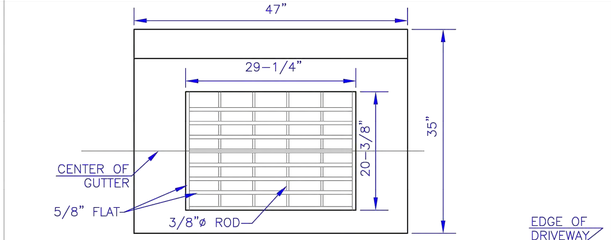
*18": 11' LANE WIDTH
24": 12' LAND WIDTH
30": 13' LAND WIDTH



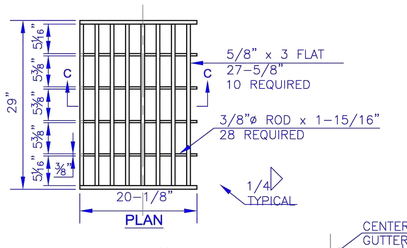
SECT. B - B

NOTES:
1. ALL MATERIAL AND METHODS SHALL BE IN ACCORDANCE WITH CITY OF TOPEKA STANDARD TECHNICAL SPECIFICATIONS, LATEST EDITION.
2. DOWEL HOLE SIZE = O.D. OF DOWEL + 1/8".
3. EPOXY GROUTING PER SEC. 830, KDOT STANDARD SPECIFICATIONS FOR STATE ROAD & BRIDGE CONSTRUCTION, LATEST EDITION.

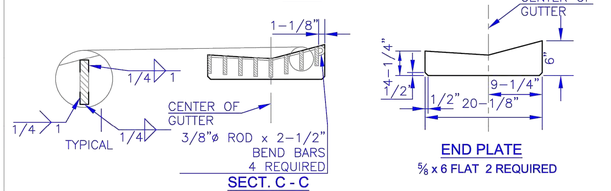
FULL PANEL REPAIR & UTILITY CUTS FOR CONCRETE PAVEMENT



REINFORCEMENT: 1/2" BARS @ 6" O.C. EACH WAY
CONCRETE: CLASS A (AE) .30 CY



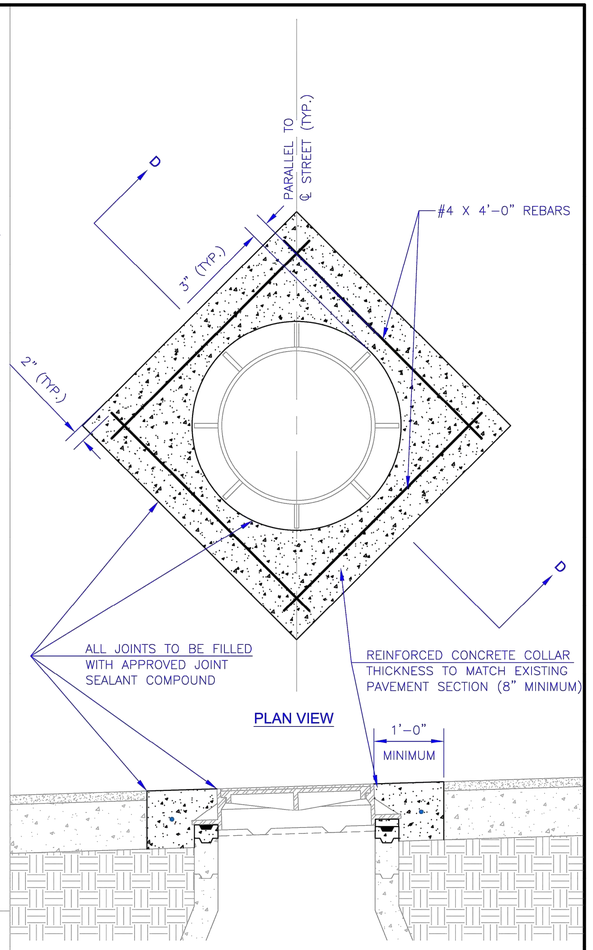
PLAN



SECT. C - C

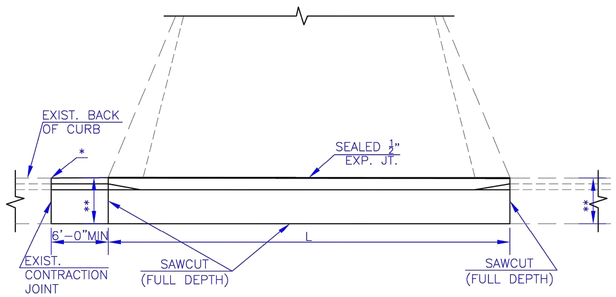
END PLATE
⅝ x 6 FLAT 2 REQUIRED

SPECIAL II-P GRATE TOP

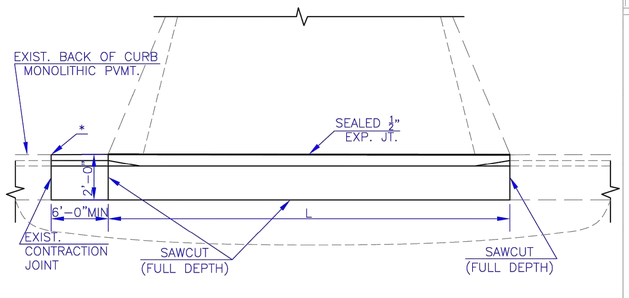


PLAN VIEW

SECT. D - D



PAVEMENT WITH CURB & GUTTER



MONOLITHIC CONCRETE PAVEMENT WITH INTEGRAL CURB

* IF CURB AND GUTTER TO BE REMOVED IS WITHIN 6'-0" OF AN EXISTING JOINT, REMOVE CURB AND GUTTER BACK TO EXISTING JOINT.
L – PER CITY STANDARD DESIGN CRITERIA.

** MATCH EXISTING CURB WIDTH.

CURB CUT/REMOVAL FOR NEW RESIDENTIAL DRIVE APPROACH

NOTES:
1. PAVEMENT SHALL BE REMOVED BY FULL DEPTH SAW CUTTING WHILE PROTECTING NEW PAVEMENT.
2. THE ORIENTATION OF THE REINFORCED CONCRETE COLLAR SHALL BE AS SHOWN OR FIELD DETERMINED BY ENGINEER.
3. ADJUST MANHOLE RING TO MATCH PAVEMENT CROSS SLOPE USING APPROVED CONCRETE MANHOLE GRADE ADJUSTMENT RINGS AND CONCRETE BLOCKS OR APPROVED HIGH-DENSITY POLYETHYLENE MANHOLE ADJUSTMENT RINGS.
4. SET MANHOLE RING WITH 2 RINGS OF 3/4" PREFORMED MASTIC SEALANT.
5. ALL TIME AND MATERIAL NECESSARY TO PERFORM THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "MANHOLE ADJUSTMENT".

MANHOLE ADJUSTMENT

NO.	DATE:	REVISION	BY:	APP'D
8	Oct. 2020	Updated cast iron monument box	JOT	BDF
7	Oct. 2017	Updated cast iron monument box	DHS	JPS
6	March 2013	Added grease to dowels & bar size to "	DHS	SB
5	Jan. 2013	Added Manhole Adjustment detail	DHS	SB
4	Jan. 2013	Removed Brick S/W & Stone Curb details	DHS	SB
3	Dec. 2012	Changed to tie bar from dowel	DHS	SB
2	Dec. 2009	Dowel size & # pvmt range and curb det	DHS	SB

DRAWN BY: jt/rm
APP'D BY: _____

SHAWNEE COUNTY, KANSAS
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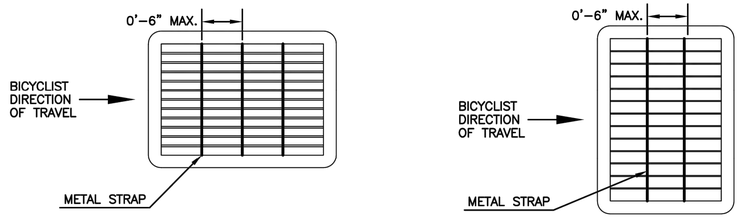
TOPEKA Public Works ENGINEERING
620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
Phone: (785) 368-3842 • Fax: (785) 368-3881

STANDARD DETAILS

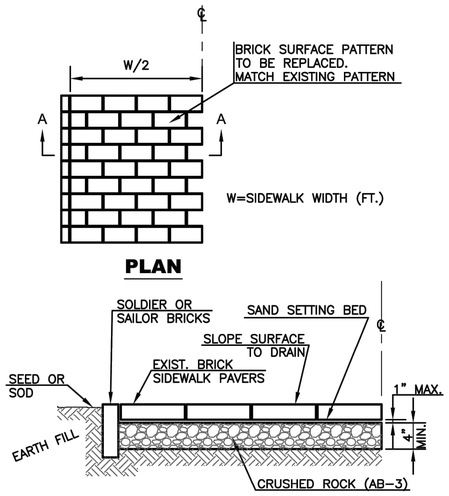
MISCELLANEOUS DETAILS I
(DT-017)

DATE: JANUARY 2026
SHEET: 21 OF 34
PROJ.: 841201.02
221114-000



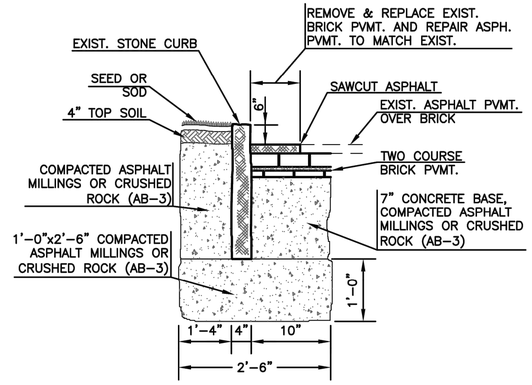
NOTES:
1. THIS MODIFICATION IS NECESSARY ON STORM INLET GRATES THAT HAVE EITHER NO BARS THAT ARE PERPENDICULAR TO A BICYCLIST'S DIRECTION OF TRAVEL OR ONES THAT ARE PERPENDICULAR TO THE DIRECTION OF TRAVEL BUT ARE GREATER THAN 0'–6" APART.
2. THIN METAL STRAPS SHALL BE WELDED ACROSS THE GRATE PERPENDICULAR TO THE DIRECTION OF TRAVEL WITH SPACING NO GREATER THAN 0'–6".

RETROFIT INLET GRATE FOR BICYCLIST SAFETY



NOTES:
1. REMOVE EXISTING BRICK SIDEWALK PAVERS AND EXCAVATE TO SUBGRADE BRICK PAVER THICKNESS PLUS 5 INCHES.
2. PLACE CRUSHED ROCK (AB–3) AND COMPACT WITH A VIBRATING PLATE COMPACTOR TO A THICKNESS OF 4 INCHES (MINIMUM).
3. PLACE CONCRETE SAND SETTING BED AND COMPACT WITH A VIBRATING PLAT COMPACTOR TO A MAXIMUM THICKNESS OF 1 INCH.
4. REPLACE/INSTALL BRICK PAVERS AND EDGE PAVERS (SOLDIER OR SAILOR) AND SWEEP JOINTS COMPLETELY FULL WITH DRY SAND.

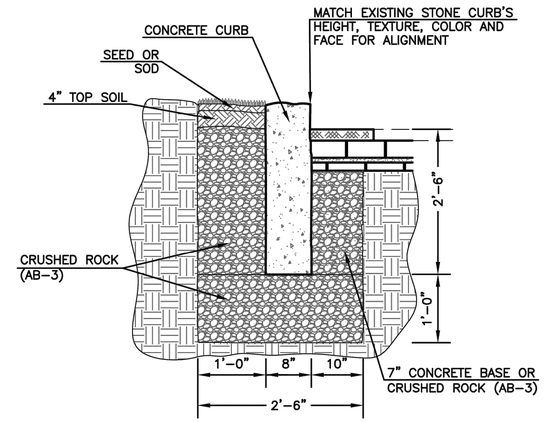
INSTALLATION/REPLACEMENT BRICK SIDEWALK PAVERS



REPLACEMENT/REPAIR OF STONE CURB

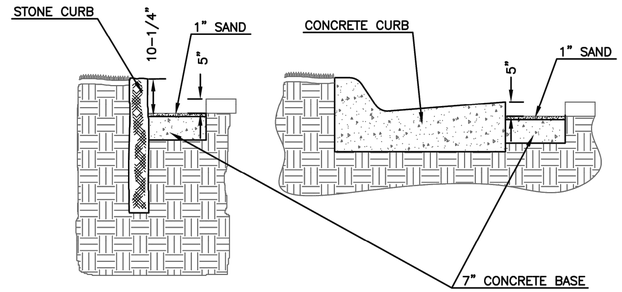
NOTES:
1. REMOVE EXISTING CURB – SALVAGE STONE FOR REUSE.
2. SALVAGE BRICK PAVERS AND SIDEWALK BRICK FOR REUSE.
3. EXCAVATE TO LIMITS SHOWN AND PLACE 1'x2'–6" COMPACTED BASE (ASPHALT MILLINGS OR CRUSHED ROCK (AB–3).
4. SET STONE CURBS TO LINE AT GRADE SHOWN AND STABILIZE CURBS WITH COMPACTED ASPHALT MILLINGS OR CRUSHED ROCK (AB–3). FINISHED CURB SHALL BE 6" HIGH WITH A MAXIMUM TOLERANCE OF 1"±. CURB STONES SHALL MATCH JOINT TO JOINT ±1/2". CURB STONES SHALL BE SET IN MAXIMUM LENGTHS OF 3', MINIMUM LENGTHS OF 2', EXCEPT AT A SINGLE POINT OF CLOSURE ON SIDEWALK CUTS.
5. REPLACE BRICK STREET PAVERS AT LOCATIONS WHERE CONCRETE CURB AND GUTTER ARE REMOVED. BRICK PAVEMENT SHALL BE RESTORED AS SHOWN ABOVE. BRICK PAVERS SHALL BE PROVIDED BY THE CONTRACTOR TO MATCH THE EXISTING PAVERS.
6. REPAIR STREET SURFACE TO MATCH EXISTING. IF EXISTING IS AN ASPHALT OVERLAY, REPAIR TO MATCH EXISTING WITH ASPHALTIC CONCRETE IN ACCORDANCE WITH CITY STANDARD TECHNICAL SPECIFICATIONS, LATEST EDITION.

TYPICAL STONE CURB DETAIL



NOTES:
1. EXCAVATE TO LIMITS SHOWN AND PLACE 1'X2'–6" COMPACTED BASE OF CRUSHED ROCK (AB–3).
2. CONSTRUCT JOINTS AT 20' CENTERS MAXIMUM.
3. AFTER PLACEMENT STABILIZE BACK OF CURB WITH CRUSHED ROCK (AB–3) AND ADD PAVEMENT BASE OF 7" CONCRETE OR COMPACTED CRUSHED ROCK (AB–3).

REPLACEMENT OF STONE CURB WITH MATCHING CONCRETE CURB



NOTES:
1. REMOVE BRICKS AND INSTALL CURB.
2. PLACE 7" CONCRETE BASE AS SHOWN.
3. PLACE 1" SAND AS SHOWN.
4. RESET BRICKS.

INSTALLING CURB ADJACENT TO EXISTING BRICK PAVEMENT

NO.	DATE:	REVISION	BY:	APP'D
1	May 2014	Added Retrofit Inlet Grate Detail	DHS	SB

DRAWN BY: DHS
APP'D BY: SB

SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
COUNTY ENGINEER
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702

TOPEKA Public Works ENGINEERING
620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
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STANDARD DETAILS

MISCELLANEOUS DETAILS III
(DT-022)

DATE: JANUARY 2026
SHEET: 22 OF 34
PROJ.: 841201.02
221114-000

7" REINFORCED CONCRETE	
STA. - STA.	QUANTITY (SY)
10+35.25 - 14+00.00	689
14+00.00 - 15+53.99	291
TOTAL	980

8" NON-REINFORCED CONCRETE	
STA. - STA.	QUANTITY (SY)
10+26.25 - 10+35.25	20
15+53.99 - 15+62.88	20
16+96.49 -16+05.49	20
TOTAL	60

REMOVE & REPLACE CONCRETE SIDEWALK	
STA. - STA.	QUANTITY (SF)
15+40.38 - 15+45.38	125
15+40.79 - 15+45.79	131
TOTAL	256

REMOVE & RESET CURB & GUTTER	
STA. - STA.	QUANTITY (LF)
+10.00	37
15+63.99 - 15+65.99	37
15+93.49 - 15+95.49	37
TOTAL	111

REMOVE & RESET BRICK ROAD	
STA. - STA.	QUANTITY (SY)
15+65.99 - 15+93.49	113
TOTAL	113

NO.	DATE:	REVISION

DRAWN BY: CTS
DESIGNED BY: FSA
APPROVED BY: FSA
SURVEYED BY: PEC
TOPEKA PM: RB

PEC

TOPEKA Public Works ENGINEERING
620 SE MADISON St. ♦ 2nd Floor ♦ TOPEKA, KS 66607
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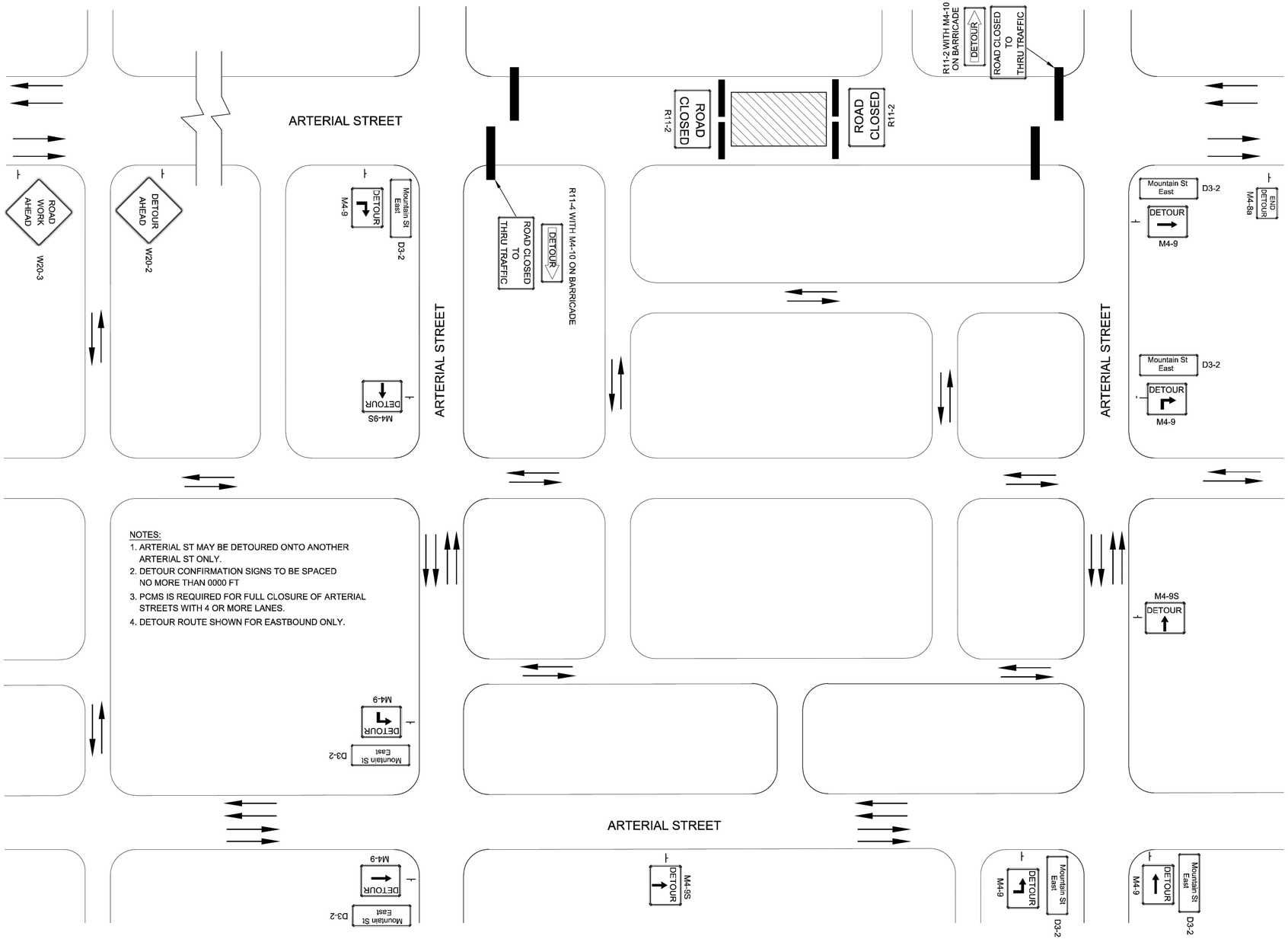
ALLEY REPAIR SOUTH OF 2ND STREET BETWEEN WOODLAWN AVE AND GREENWOOD AVE

ROADWAY IMPROVEMENT PROJECT NO. 841201.02
WATERLINE PROJECT NO. 281250.18
SANITARY SEWER PROJECT NO. 291128.10

ALLEY REPAIR SOUTH OF 2ND STREET BETWEEN WOODLAWN AVE AND GREENWOOD AVE

SUMMARY OF QUANTITIES

DATE: FEBRUARY 2026
SHEET: 23 OF 36
PROJ.: 841201.02/281250.18/291128.10
PEC#: 221114-000



GENERAL NOTES:

72–HOUR NOTICE TO CITY IS REQUIRED BEFORE WORK IS STARTED. CONTACT 785–368–3842 FOR TRAFFIC DISRUPTION PERMIT.

72–HOUR NOTICE IS REQUIRED IF TRAFFIC SIGNALS ARE TO BE MODIFIED AS PART OF TRAFFIC CONTROL. CONTACT 785–368–3913.

ALL SIGNS SHALL TO BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC WHEN NOT IN USE.

ALL WORKERS SHALL WEAR HIGH VISIBILITY APPAREL MEETING ANSI 107–2015 CLASS 2 OR 3.

FOR OPERATIONS OF LESS THAN 60 MINUTES, ALL SIGNS AND CHANNELIZING DEVICES MAY BE ELIMINATED IF A VEHICLE WITH HIGH INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS IS USED. VEHICLE WARNING FLASHERS SHALL NOT BE USED IN LIEU OF ROTATING FLASHING BEACONS LONGER THAN 15 MINUTES.

FORMULAS FOR DETERMINING TAPER LENGTH

SPEED (S)	TAPER LENGTH (L) IN FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	L = WS

WHERE: L = TAPER LENGTH IN FEET
W = WIDTH OF LANE OR OFFSET IN FEET
S = POSTED SPEED LIMIT PRIOR TO WORK STARTING

SPEED LIMIT	TAPER (L) 12' LANE	SIGN SPACING (X)	BUFFER SPACE
20mph	80'	100'	115'
25mph	125'	100'	155'
30mph	180'	100'	200'
35mph	245'	100'	250'
40mph	320'	100'	305'
45mph	540'	350'	360'

TABLE 118 A (1)

EXCEPT AS NOTED (DOWNSTREAM TAPER, FLAGGER OPERATIONS, YIELD OPERATION), SPACE CHANNELIZER @ SPEED LIMIT. IF SPEED LIMIT IS 40mph SET DEVICES AT 40'.

LEGEND

- = SIGN
- = TYPE III BARRICADE
- O = CHANNELIZING DEVICES
- = ARROW PANEL BOARD
- = WORK SPACE
- = FLAGGER

NO.	DATE:	REVISION	BY:	APP'D
1	10/30/20	MAJOR REVISION	SU	KRE

DRAWN BY: Shoeb Uddin
APP'D BY: Kristi Ericksen

TOPEKA Public Works
ENGINEERING
620 SE MADISON STREET - 2nd FLR. • TOPEKA, KS 66607
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STANDARD DETAILS
DT - 118 A

TRAFFIC CONTROL
Arterial Street Closure

DATE: JANUARY 2026
PAGE: 2 OF 34
PROJECT: 841201.02
221114-000

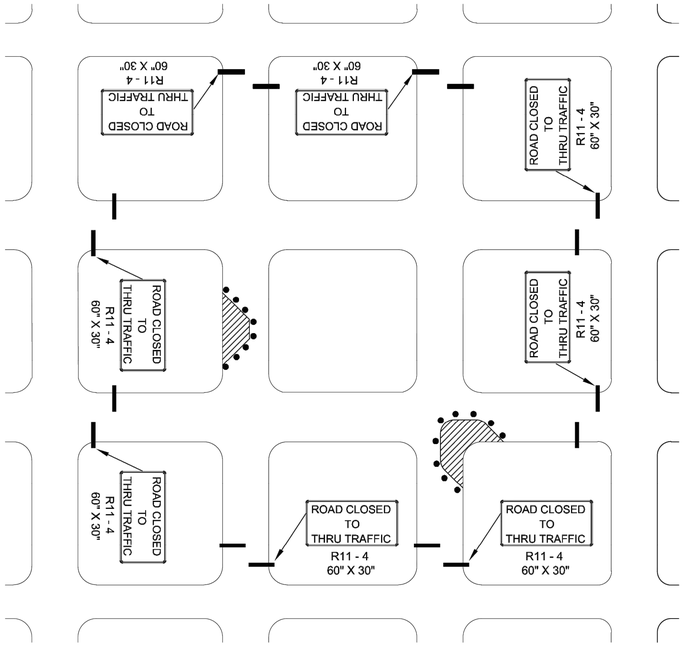
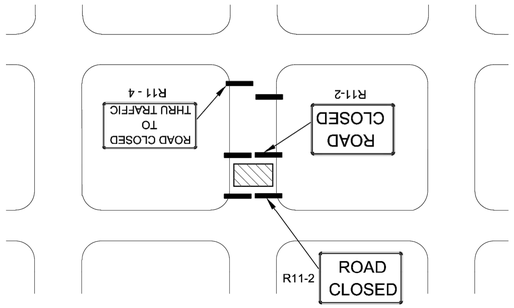


FIGURE - 118 B (1)
CONSTRUCTION WORK ON RESIDENTIAL / LOCAL STREETS



Need for Detour will be determined by the Engineer. Collector Streets cannot be detoured onto local or residential streets.

FIGURE - 118 B (2)
CLOSURE OF RESIDENTIAL / LOCAL STREETS

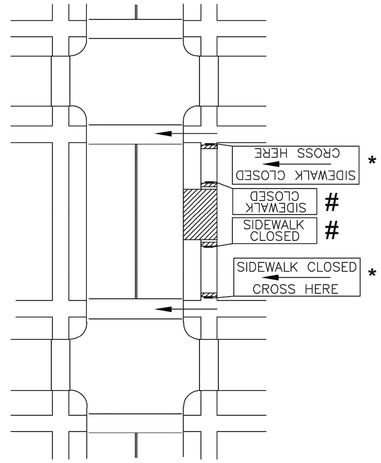


FIGURE - 118 B (3)
MID-BLOCK SIDEWALK CLOSURE
WITH PEDESTRIAN DETOUR

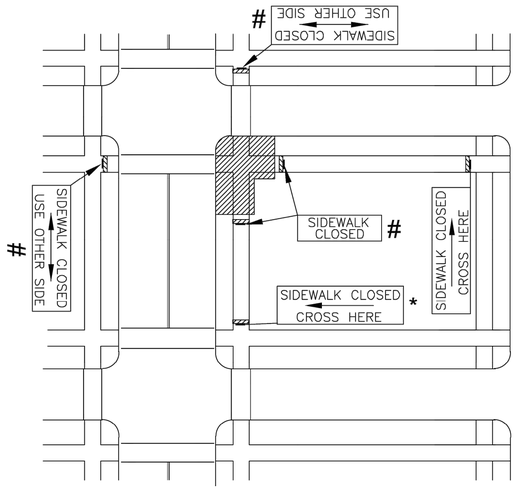


FIGURE - 118 B (4)
CORNER SIDEWALK CLOSURE
WITH PEDESTRIAN DETOUR

* ADVANCE SIGNS TO BE PLACED ON TYPE I OR TYPE II BARRICADES OR POST MOUNTED. PLACEMENT SHALL BE SUCH THAT SO THAT AT LEAST 48" OF SIDEWALK IS AVAILABLE FOR PEDESTRIAN USE.

\# SIGNS TO BE PLACED ON CONTINUOUS DETECTABLE DEVICES.

LEGEND

- = SIGN
- = TYPE III BARRICADE
- O = CHANNELIZING DEVICES
- = ARROW PANEL BOARD
- = WORK SPACE
- = FLAGGER

NO.	DATE:	REVISION	BY:	APP'D
1	10/20/30	MAJOR REVISION	SU	KRE

DRAWN BY: Shoeb Uddin
APP'D BY: Kristi Ericksen

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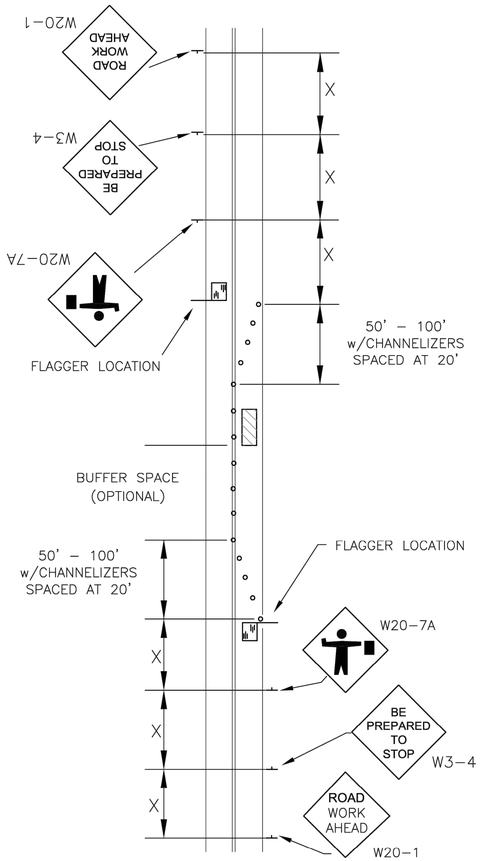
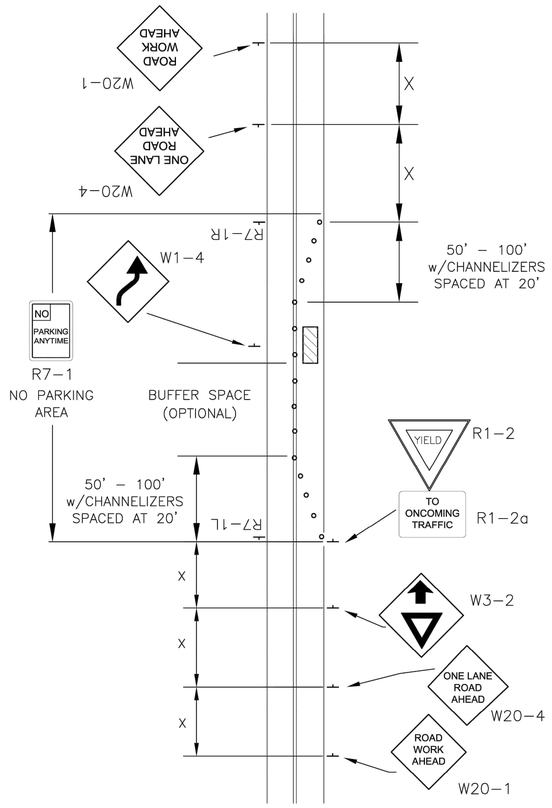
STANDARD DETAILS
DT - 118 B

TRAFFIC CONTROL
LOCAL STREET / SIDEWALK CLOSURES

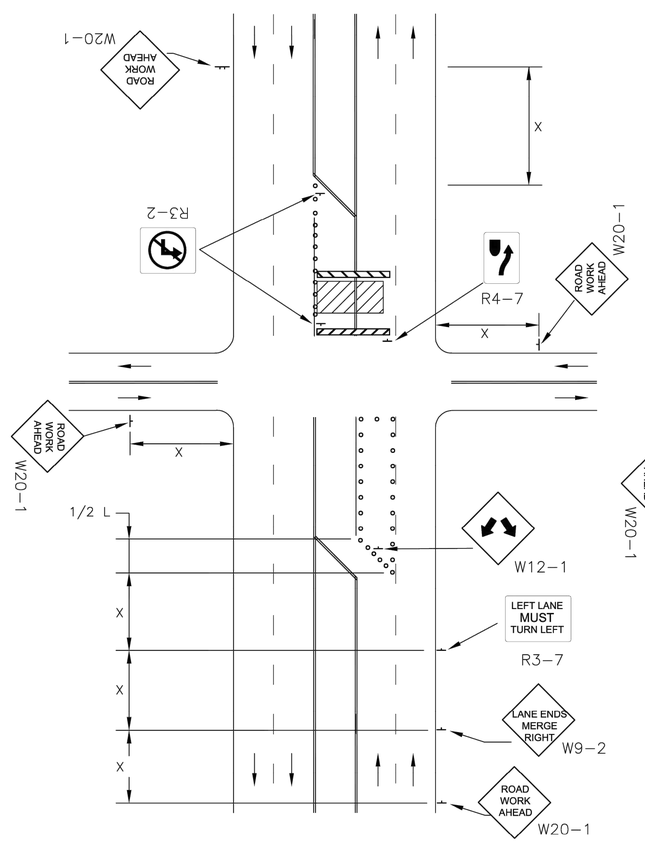
DATE: JANUARY 2026
PAGE: 25 OF 34
PROJECT: 841201.02
221114-000



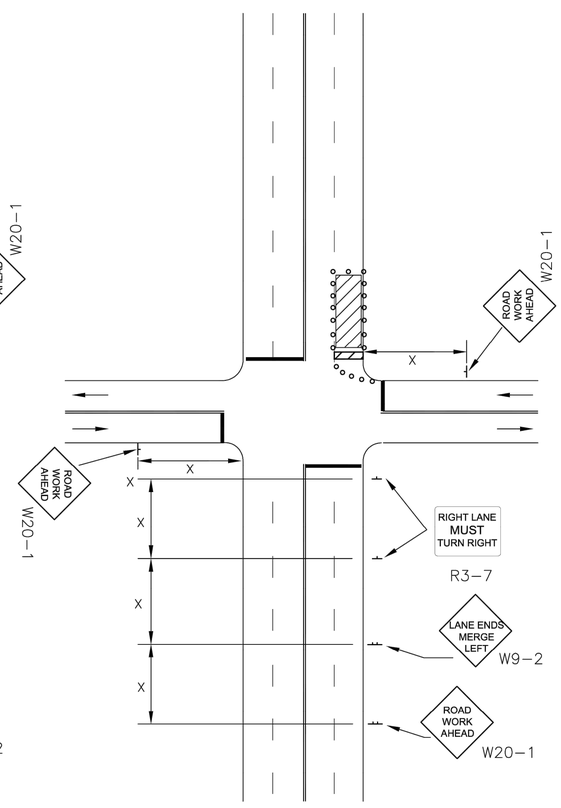
LANE CLOSURE ON TWO-LANE ROAD W/ FLAGGER, DAYTIME ONLY



LANE CLOSURE ON TWO-LANE ROAD WITH LOW TRAFFIC VOLUMES (PRIOR APPROVAL REQUIRED)



MULTIPLE LANE CLOSURE AT AN INTERSECTION



RIGHT -HAND LANE CLOSURE ON THE FAR SIDE OF AN INTERSECTION

REFER TO SHEET DT-118 FOR TAPER LENGTH(L) AND SIGN SPACING(X) VALUES

NO.	DATE:	REVISION	BY:	APP'D
3	08/15/23	UPDATE W9–2 SIGN TEXT	AMR	
2	08/06/15	REMOVE W4–7 & REPLACE WITH W9–2	KAP	TLC
1	01/30/12	UPDATE SPECIFICATIONS	KAP	LGV

DRAWN BY: K.PELTON

APP'D BY: T. CODER

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TRAFFIC CONTROL

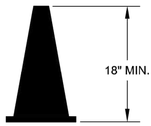
DATE: JANUARY 2026

PAGE: 26 OF 34

DRAWING: DT–119

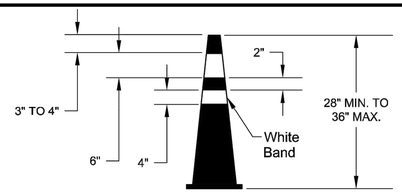
841201.02

PROJ. 221114-000



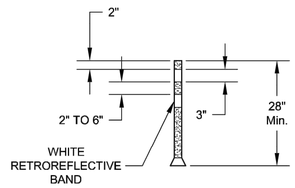
CONES

DAY TIME USE ONLY
(≤ 40 MPH)

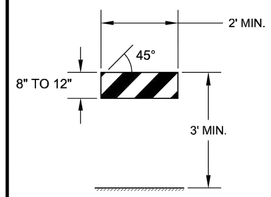


CONES

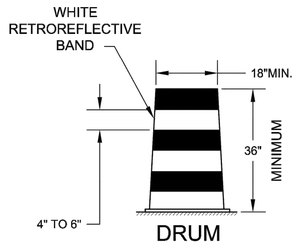
FLUORESCENT ORANGE CONE
w/ WHITE RETROREFLECTIVE BANDS



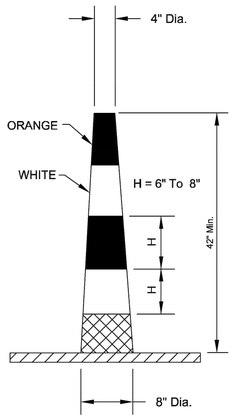
TUBULAR MARKERS



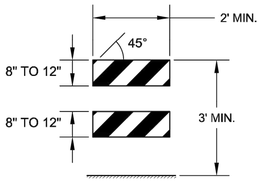
TYPE I BARRICADE



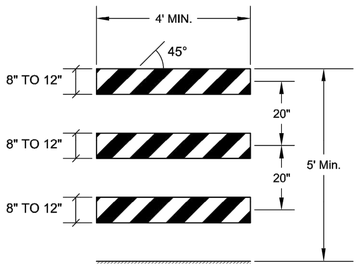
DRUM



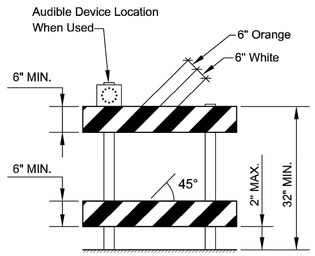
CONICAL
DELENEATOR



TYPE II BARRICADE



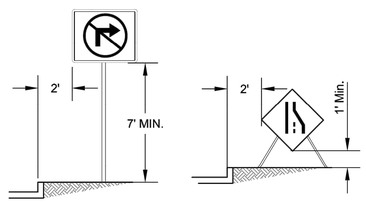
TYPE III BARRICADE



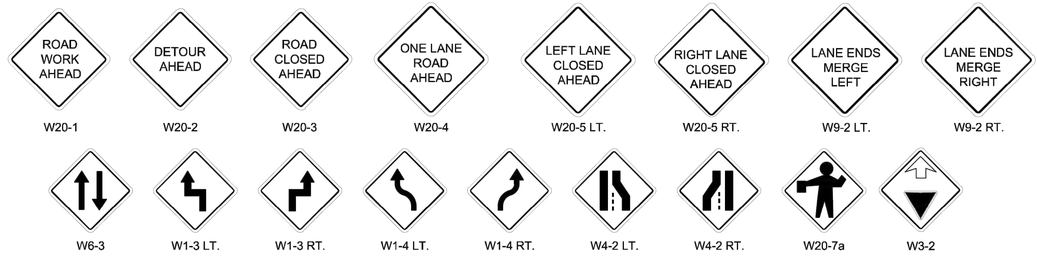
DETECTABLE PEDESTRIAN
BARRICADE/CHANNELIZER

NOTES:

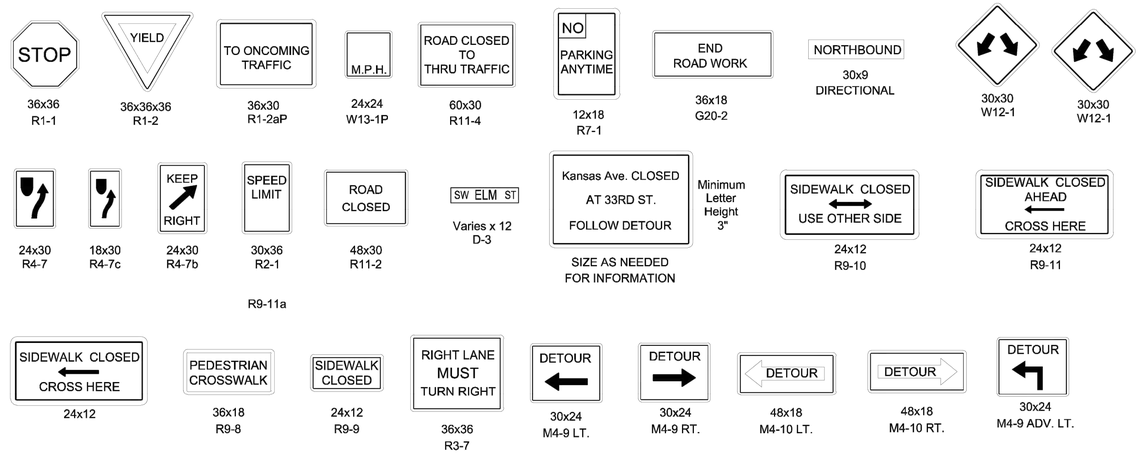
1. Barricades (Type 2 or 3) shall be used to close the entire width of the pathway.
2. Do not use warning lights on pedestrian barricades or on audible devices.
3. Upper rail shall be continuously smooth.
4. Adjacent sections of barricades shall be interlocked together, and shall have the same base color (orange or yellow) .
5. Stripes are optional. As an alternate, the top rail may be orange and the bottom rail may be white.



HEIGHT AND LOCATION OF SIGNS



UNLESS OTHERWISE NOTED ALL WARNING SIGNS SHALL BE 36"x36"



Minimum Size:

Refer to Table 6F-1 of the most recent edition of MUTCD for minimum sizes of all Traffic Control Signs.

TYPICAL TRAFFIC CONTROL SIGNS USED IN CITY PROJECTS

Recapitulation of Traffic Control Quantities

Item	Quantity	Unit
Traffic Control	1	Lump Sum
Work Zone Information Signs		Each
Flashing or Sequencing Arrow Board		Each Week
Portable Changeable Message Sign		Each Week
Temporary Traffic Signal		Lump Sum
Temporary Pavement Marking (*) (**) (***)		LF
Surface Drop off Treatment		LF

(*) Type Pavement Marking: Type I, Type II, Masking
(**) Color
(***) Width

NO.	DATE:	REVISION	BY:	APP'D
1	10/30/20	MAJOR REVISION	SU	KRE

DRAWN BY: Shoeb Uddin

APP'D BY: Kristi Ericksen

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STANDARD DETAILS
DT - 121A

TRAFFIC CONTROL
DEVICES AND RECAP OF QUANTITIES

DATE: JANUARY 2026

PAGE: 27 OF 34

PROJECT: 841201.02
221114-000

✳Quantity most used on the Project at any one time

Lighted Devices ✳	
Device Type	Quantity
Work Zone Warning Light (Type "A" Low Intensity)	
Work Zone Warning Light (Red Type "B" High Intensity)	
Arrow Display	
Portable Changeable Message Sign	

Barricades ✳	
Type	Quantity
Type 3 (4' to 12')	8
Pedestrian	8

Channelizing Devices ✳	
Type	Quantity
Fixed	
Portable	20
Pedestrian	

SUMMARY OF TRAFFIC CONTROL DEVICES (EACH PER DAY)

Work Zone Signs ✳			
MUTCD Sign No.	Quantity		
	0-9.25 sq. ft	9.26-16.25 sq. ft	16.26 sq. ft & Over
R11-2		2	
R9-10		4	
R9-11		4	

Recapitulation of Traffic Control Quantities

Item	Quantity	Unit
Work Zone Signs (0 to 9.25 Sq.Ft.)		Each Per Day
Work Zone Signs (9.26 to 16.25 Sq.Ft.)		Each Per Day
Work Zone Signs (16.26 Sq.Ft. & Over)		Each Per Day
Work Zone Barricades (Type 3 - 4' to 12')		Each Per Day
Work Zone Barricades (Pedestrian)		Each Per Day
Channelizer (Fixed)		Each Per Day
Channelizer (Portable)		Each Per Day
Channelizer (Pedestrian)		Each Per Day
Work Zone Warning Light (Type "A" Low Intensity)		Each Per Day
Work Zone Warning Light (Red Type "B" High Intensity)		Each Per Day
Arrow Display		Each Per Day
Portable Changeable Message Sign		Each Per Day
Pavement Marking (Temporary)		
4" Solid (Type I)		Sta./Line
4" Solid (Type II)		Sta./Line
4" Broken (8.0') (Type I)		Sta./Line
4" Broken (8.0') (Type II)		Sta./Line
4" Broken (3.0') (Type I)		Sta./Line
4" Broken (3.0') (Type II)		Sta./Line
4" Dotted Extension (Type I)		Sta./Line
4" Dotted Extension (Type II)		Sta./Line
Solid (Line Masking Tape)		Sta./Line
Broken (Line Masking Tape)		Sta./Line
Symbol (Type I)		Each
Symbol (Type II)		Each
Flexible Raised Pavement Marker (4" Broken (8.0'))		Sta./Line
Flexible Raised Pavement Marker (4" Broken (3.0'))		Sta./Line
Pavement Marking Removal		Lin. Ft.
Work Zone Sign (Special) (16.25 Sq. Ft. & Less)		Each
Work Zone Sign (Special) (16.26 Sq. Ft. & More)		Each
Rigid Raised Pavement Marker (Type I)		Each
Rigid Raised Pavement Marker (Type II)		Each
Traffic Signal Installation (Temporary)		Lump Sum
Traffic Control (Initial Set Up)	Lump Sum	Lump Sum
Traffic Control		Lump Sum
Flagger (Set Price)		Hour

NO.	DATE:	REVISION	BY:	APP'D
1	10/30/20	MAJOR REVISION	SU	KRE

DRAWN BY: Shoeb Uddin

APP'D BY: Kristi Ericksen

TOPEKA Public Works ENGINEERING
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Phone: (785) 368-3842 • Fax: (785) 368-3881

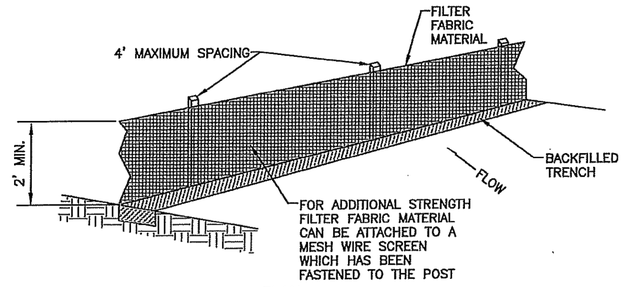
STANDARD DETAILS

DT - 121 B

TRAFFIC CONTROL

DATE: JANUARY 2026

PROJECT: 841201.02
221114-000



PLAN

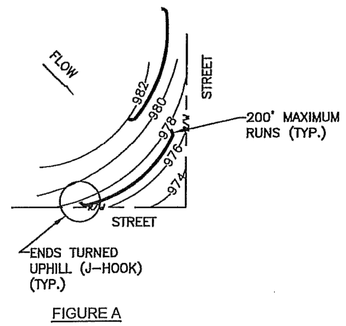
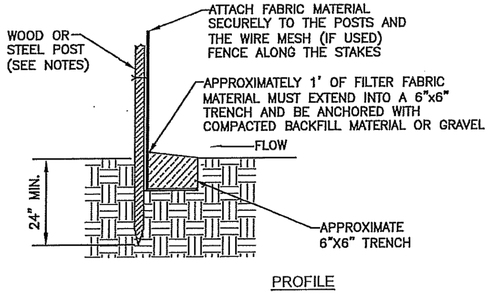


FIGURE A

Land Slope and Distance for Sediment Fence

Land Slope (percent)	Maximum Slope Distance* above Fence (feet)
Less than 2	100
2 to 5	75
5 to 10, greater than 10	50*

*Follow manufacturers' recommendations for proper spacing.



PROFILE

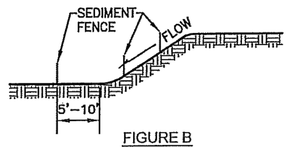
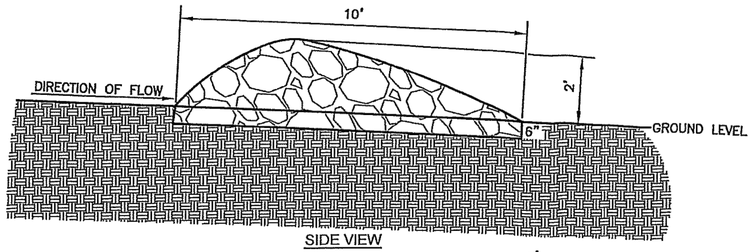


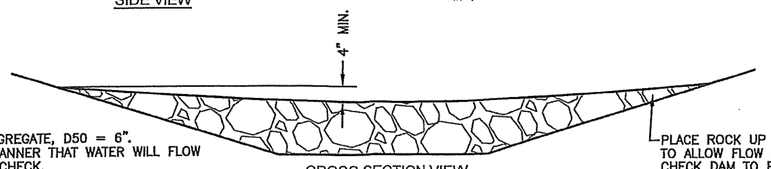
FIGURE B

NOTES:
1. THE USE OF HAY/STRAW BALES IS THE CONTRACTOR'S OPTION. IF HAY BALES ARE USED PLACE TIGHTLY TOGETHER WITH 2"X2"X4' (MIN.) LENGTH WOOD STAKES IN OUTER 1/3 SECTIONS OF BALES. BALES SHOULD EMBEDDED INTO THE SOIL A MINIMUM OF 6" WITHIN A MAXIMUM DRAINAGE AREA OF 1 ACRE OR LESS.
2. THE SEDIMENT FENCES SHALL BE PLACED ALONG CONTOUR LINES, WITH A SHORT SECTION TURNED UPGRADE (J–HOOK) AT EACH END OF THE BARRIERS TO HOLD WATER AND SEDIMENT (SEE FIGURE A).
3. AREAS THAT CONTAIN LARGER CONCENTRATIONS OF WATER SHALL BE LIMITED TO LENGTHS OF SILT FENCES TO NO LONGER THAN 200' (SEE FIGURE A). LIMIT TO 1/4 ACRE PER 100' OF FENCE. FURTHER RESTRICT AREA BY LAND SLOPE TABLE ABOVE.
4. AREAS SHOULD BE BROKEN UP WITH INTERIOR SEDIMENT FENCE TO MINIMIZE WATER CONCENTRATIONS AND LONG SLOPES (SEE FIGURE B).
5. SEDIMENT FENCES INSTALLED AT TOE OF SLOPE SHALL BE PLACED 5' TO 10' AWAY (DOWNSTREAM) TO CREATE SEDIMENT STORAGE (SEE FIGURE B).
6. DEPTH OF WATER CONCENTRATIONS SHOULD NOT EXCEED 1.5' AT ANY POINT ALONG THE FENCE.
7. PLACE SILT FENCE ONLY WHERE OVERLAND OR SHEET FLOW DISCHARGES OCCUR.
8. SILT FENCES SHOULD NOT BE USED IN CONCENTRATED FLOW CHANNELS, OR AS INLET PROTECTION DEVICES IF FLOODING CONDITIONS COULD OCCUR.
9. DO NOT USE HAY OR STRAW BALES WITH WIRE TIES.
10. WHEN SEDIMENT REACHES 1/2 HEIGHT OF SILT FENCE OR SIMILAR CONTROL MEASURE, THE CONTRACTOR SHALL REMOVE THE SEDIMENT.

SILT FENCE



SIDE VIEW

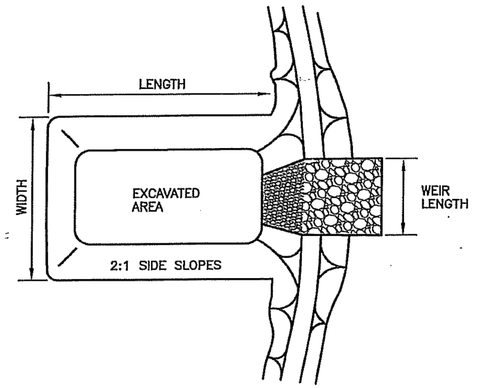


CROSS SECTION VIEW

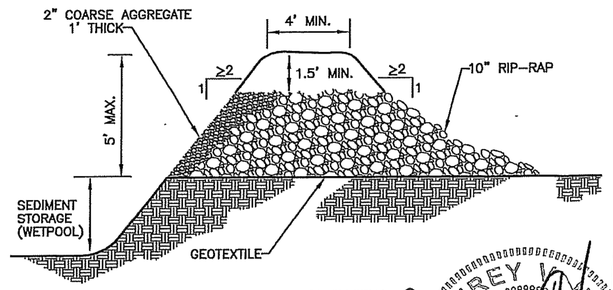
TEMPORARY ROCK DITCH CHECK SPACING	
DITCH ℄ SLOPE (%)	SPACING INTERVAL (FEET)
5.0	60
6.0	50
7.0	43
8.0	36
9.0	33
10.0	29
THIS SPACING IS TO BE USED FOR ROCK DITCH CHECKS ONLY.	

NOTES:
1. ROCK SHALL BE CLEAN AGGREGATE, D50 = 6".
2. PLACE ROCK IN SUCH A MANNER THAT WATER WILL FLOW OVER, NOT AROUND DITCH CHECK.
3. DO NOT USE ROCK DITCH CHECKS IN CLEAR ZONE.
4. AGGREGATE EXCAVATED ON SITE MAY BE USED AS AN ALTERNATE TO THE 6" ROCK, IF APPROVED BY THE ENGINEER.

ROCK DITCH CHECK

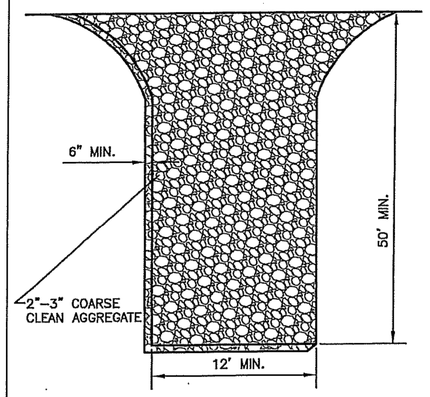


TOP VIEW



SIDE VIEW

SEDIMENT BASIN



NOTES:
1. GEOTEXTILE FABRIC MAY BE USED AS AN UNDERLINER IN WET CONDITIONS TO PROVIDE STABILITY.
2. PROVIDE SUFFICIENT WIDTH, LENGTH & TURNING RADIUS FOR CONSTRUCTION VEHICLES ENTERING & EXITING SITE.
3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF SEDIMENT ON TO STREETS AND KEEP THE ENTRANCE EFFECTIVE.
4. PROPERLY GRADE TO PREVENT RUNOFF FROM LEAVING CONSTRUCTION SITE THROUGH ENTRANCE/EXIT.
5. DO NOT ALLOW ROCK SPACES TO BE FILLED IN WITH DIRT – ROCKS MUST BE KEPT LOOSE.

CONSTRUCTION ENTRANCE

NO.	DATE:	REVISION	BY:	APP'D
3	May 2015	Updated Notes & Added Rock Ditch Check	DHS	JDH
2	March 2013	Repl. Sed. Trap & Added Land Slope Table	DHS	JDH
1	Dec. 2009	Modified Stake Depth & Spacing	DHS	JDH

DRAWN BY: DHS

APP'D BY: JDH

SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
COUNTY ENGINEER
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702

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STANDARD DETAILS

JEFFREY K. LUNDY
LICENSED
15
7/31/2015
PROFESSIONAL ENGINEER

EROSION & POLLUTION CONTROL
SILT FENCE, SEDIMENT BASIN, CONSTRUCTION ENTRANCE, AND ROCK DITCH CHECK
(DT-021)

DATE: JANUARY 2026
SHEET: 27 OF 34
PROJ.: 841201.02
221114-000

1"=5'

NO.	DATE:	REVISION

DRAWN BY: CTS
DESIGNED BY: FSA
APPROVED BY: FSA
SURVEYED BY: PEC
TOPEKA PM: RB

PEC

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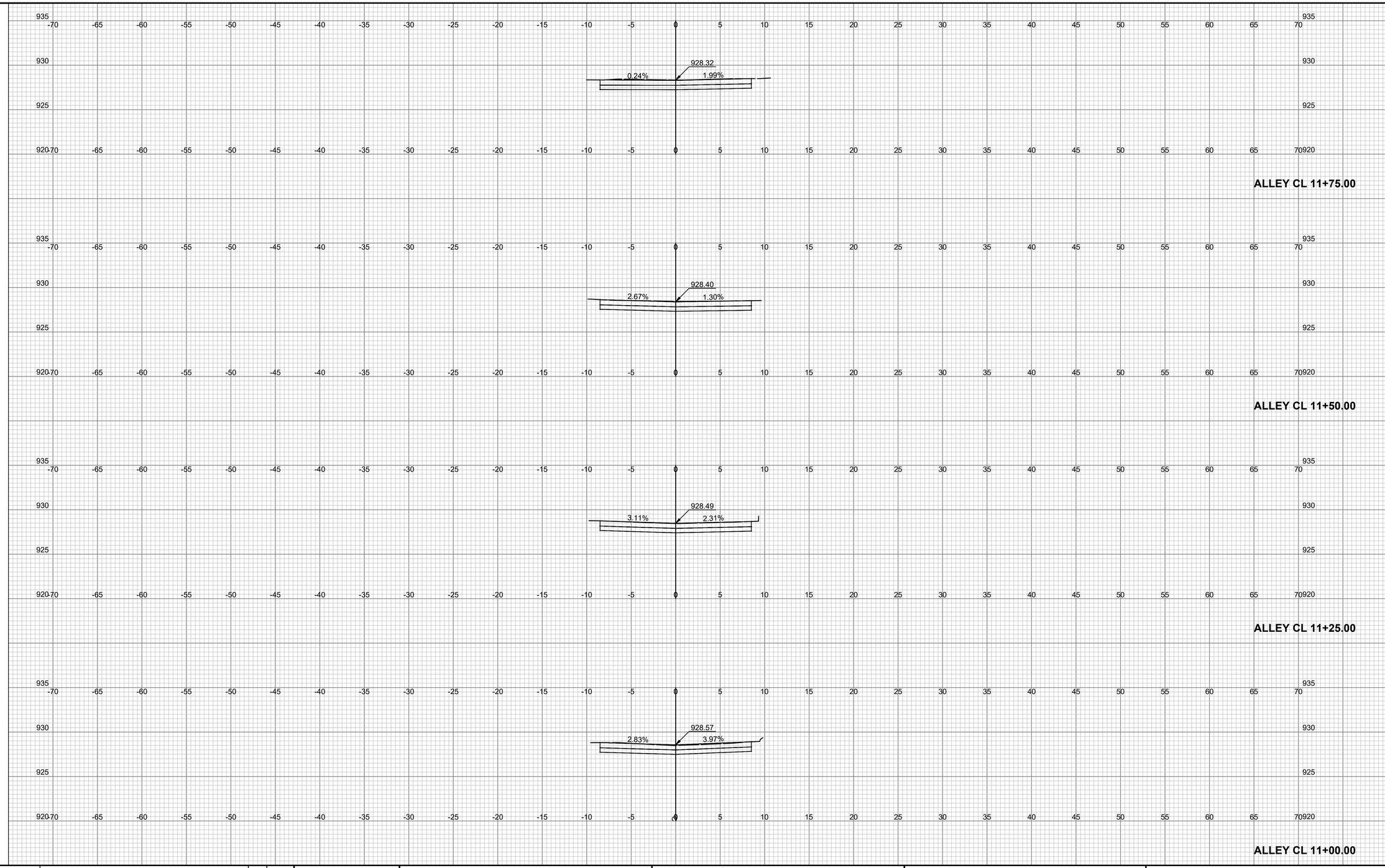
ALLEY REPAIR SOUTH OF 2ND STREET BETWEEN WOODLAWN AVE AND GREENWOOD AVE

ROADWAY IMPROVEMENT PROJECT NO. 841201.02
WATERLINE PROJECT NO. 281250.18
SANITARY SEWER PROJECT NO. 291128.10

CROSS SECTIONS

STA. 10+23.25 TO STA. 10+75.00

DATE: FEBRUARY 2026
SHEET: 30 OF 36
PROJ.: 841201.02/281250.18/291128.10
PEC#: 221114-000



1"=5'

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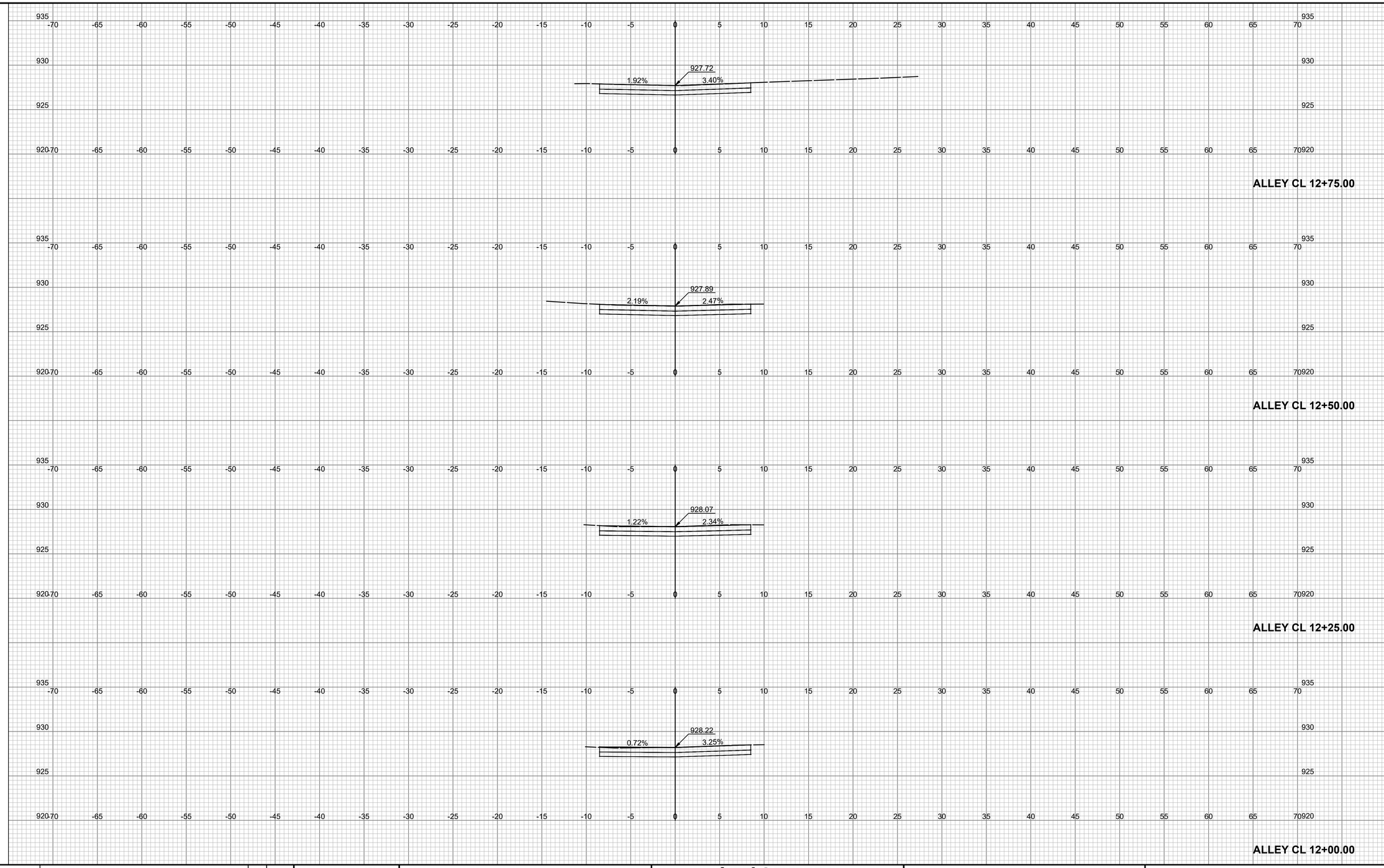
ROADWAY IMPROVEMENT PROJECT NO. 841201.02
WATERLINE PROJECT NO. 281250.18
SANITARY SEWER PROJECT NO. 291128.10

CROSS SECTIONS

STA. 11+00.00 TO STA. 11+75.00

DATE: FEBRUARY 2026
SHEET: 31 OF 36
PROJ.: 841201.02/281250.18/291128.10
PEC#: 221114-000



1"=5'

NO.	DATE:	REVISION

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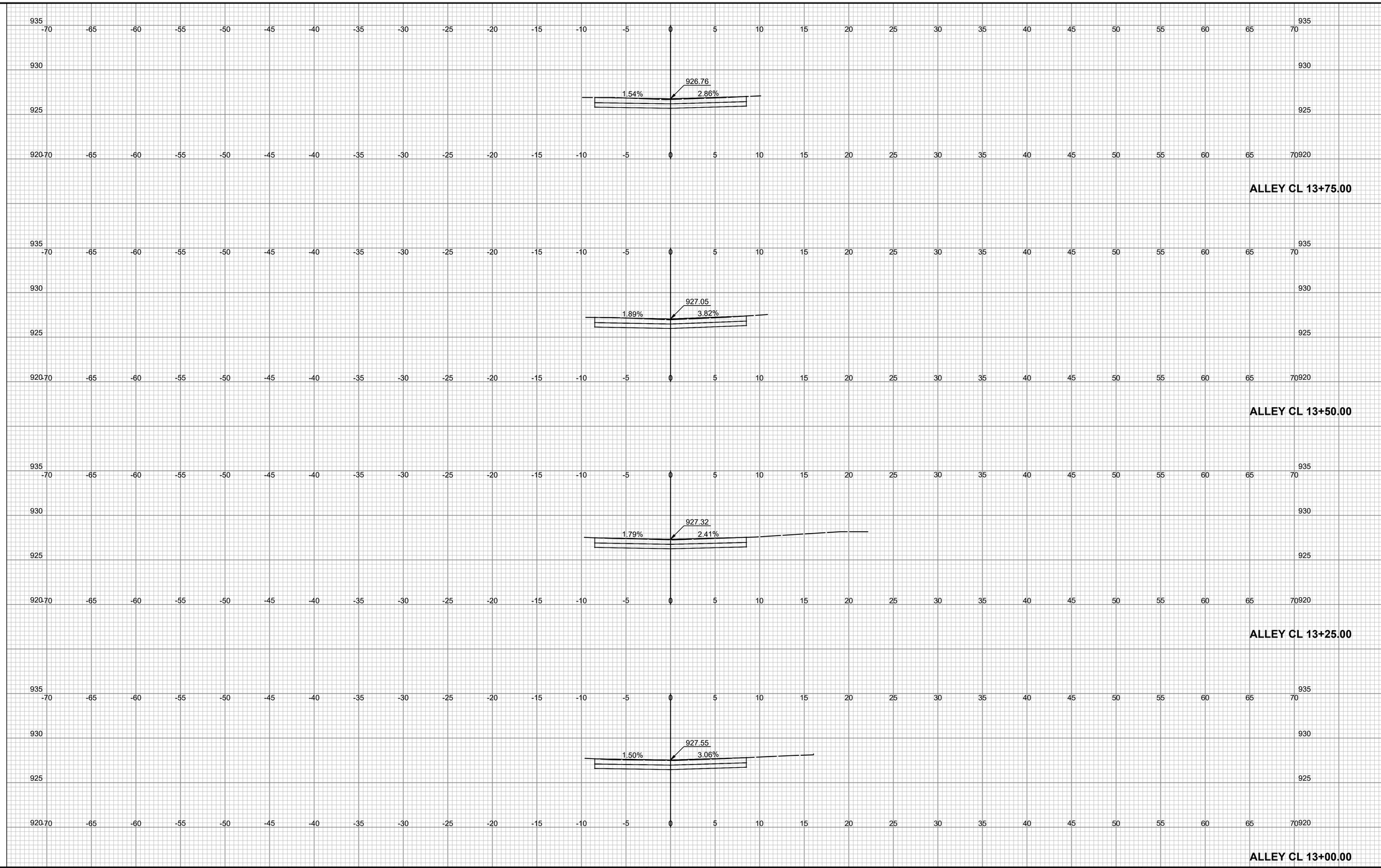
SANITARY SEWER PROJECT NO. 291128.10

CROSS SECTIONS

STA. 12+00.00 TO STA. 12+75.00

DATE: FEBRUARY 2026
SHEET: 32 OF 36
PROJ.: 841201.02/281250.18/291128.10
PEC#: 221114-000



1"=5'

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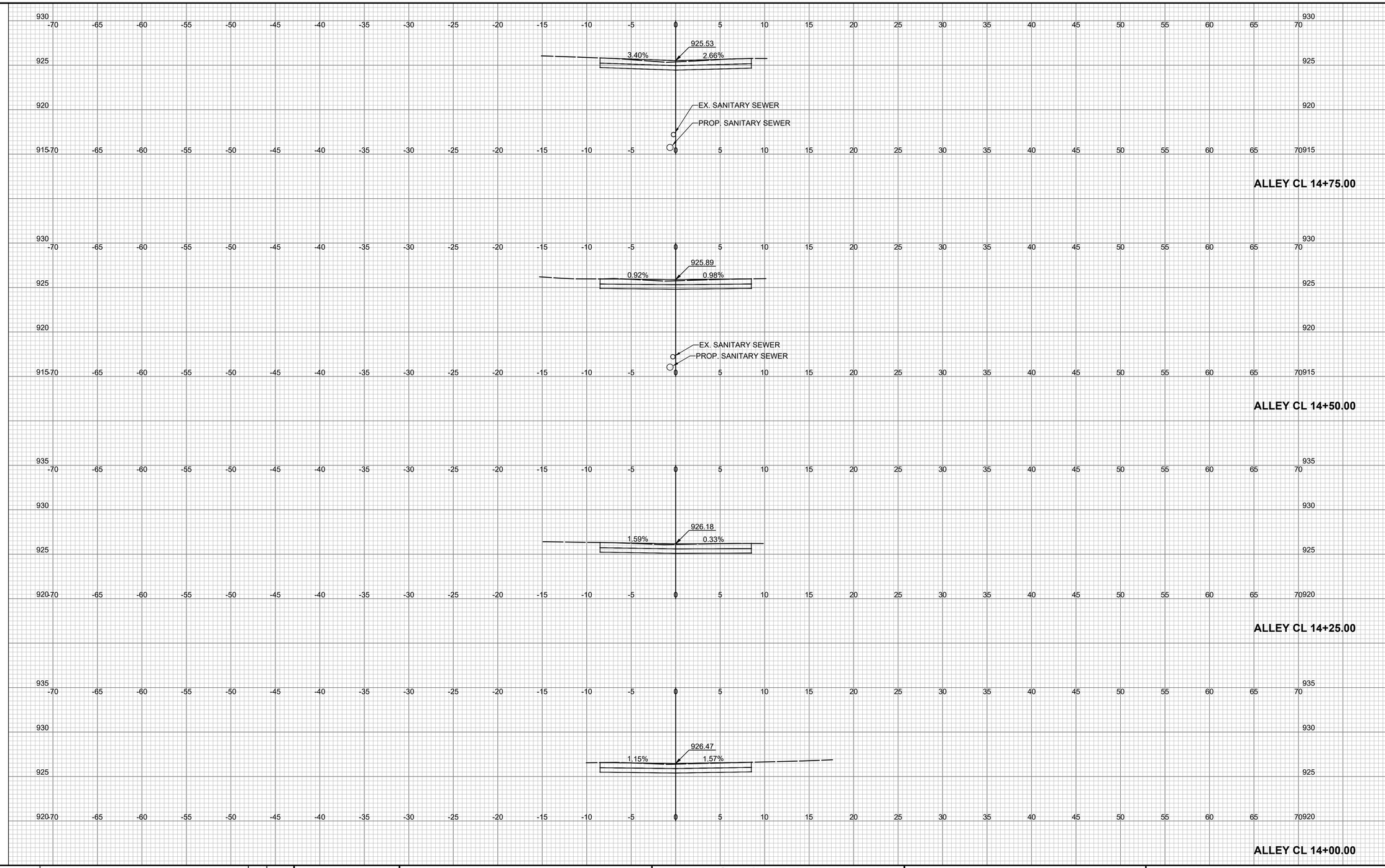
SANITARY SEWER PROJECT NO. 291128.10

CROSS SECTIONS

STA. 13+00.00 TO STA. 13+75.00

DATE: FEBRUARY 2026
SHEET: 33 OF 36
PROJ.: 841201.02/281250.18/291128.10
PEC#: 221114-000



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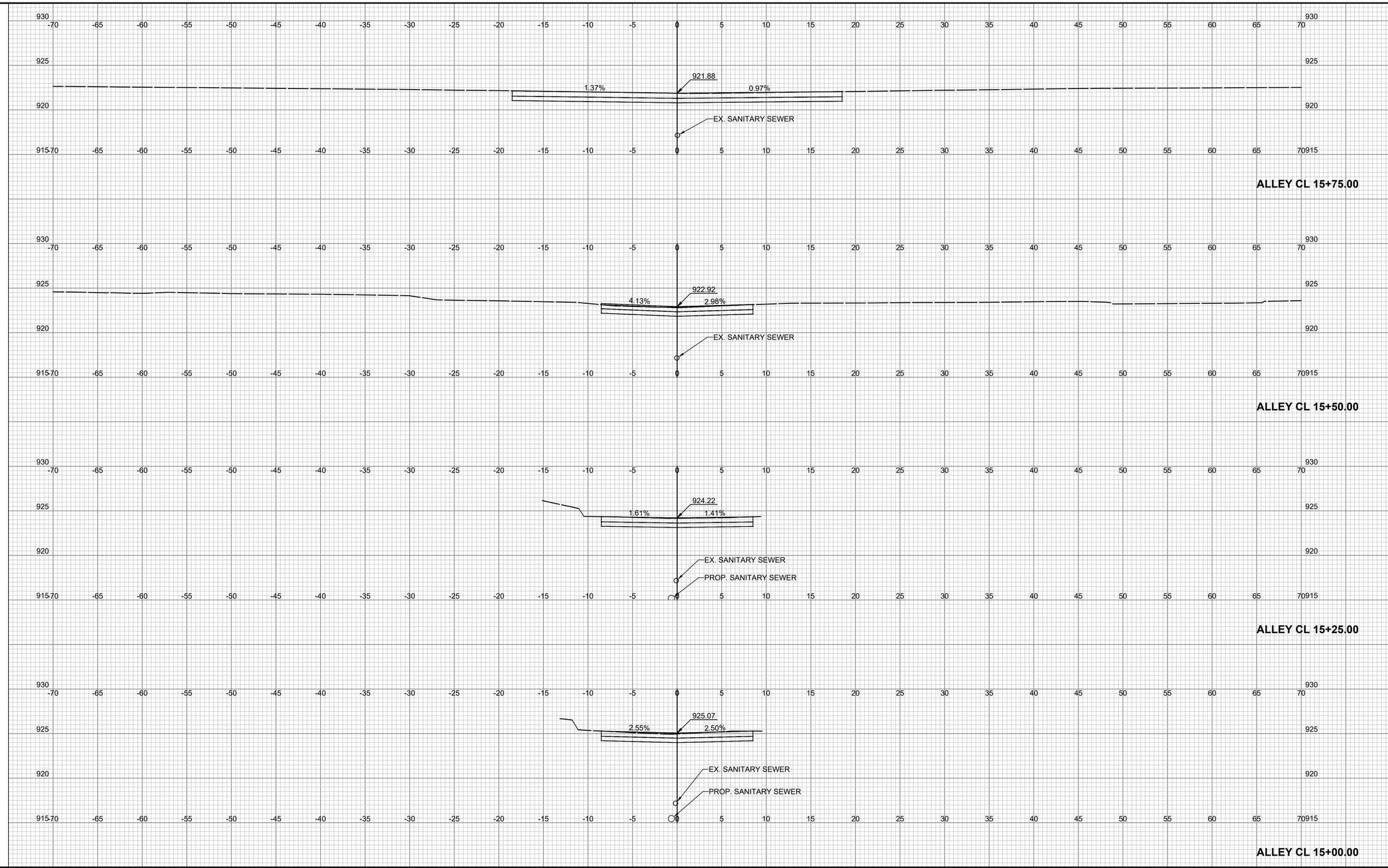
CROSS SECTIONS

STA. 14+00.00 TO STA. 14+75.00

DATE: FEBRUARY 2026
SHEET: 34 OF 36
PROJ.: 841201.02/281250.18/291128.10
PEC#: 221114-000



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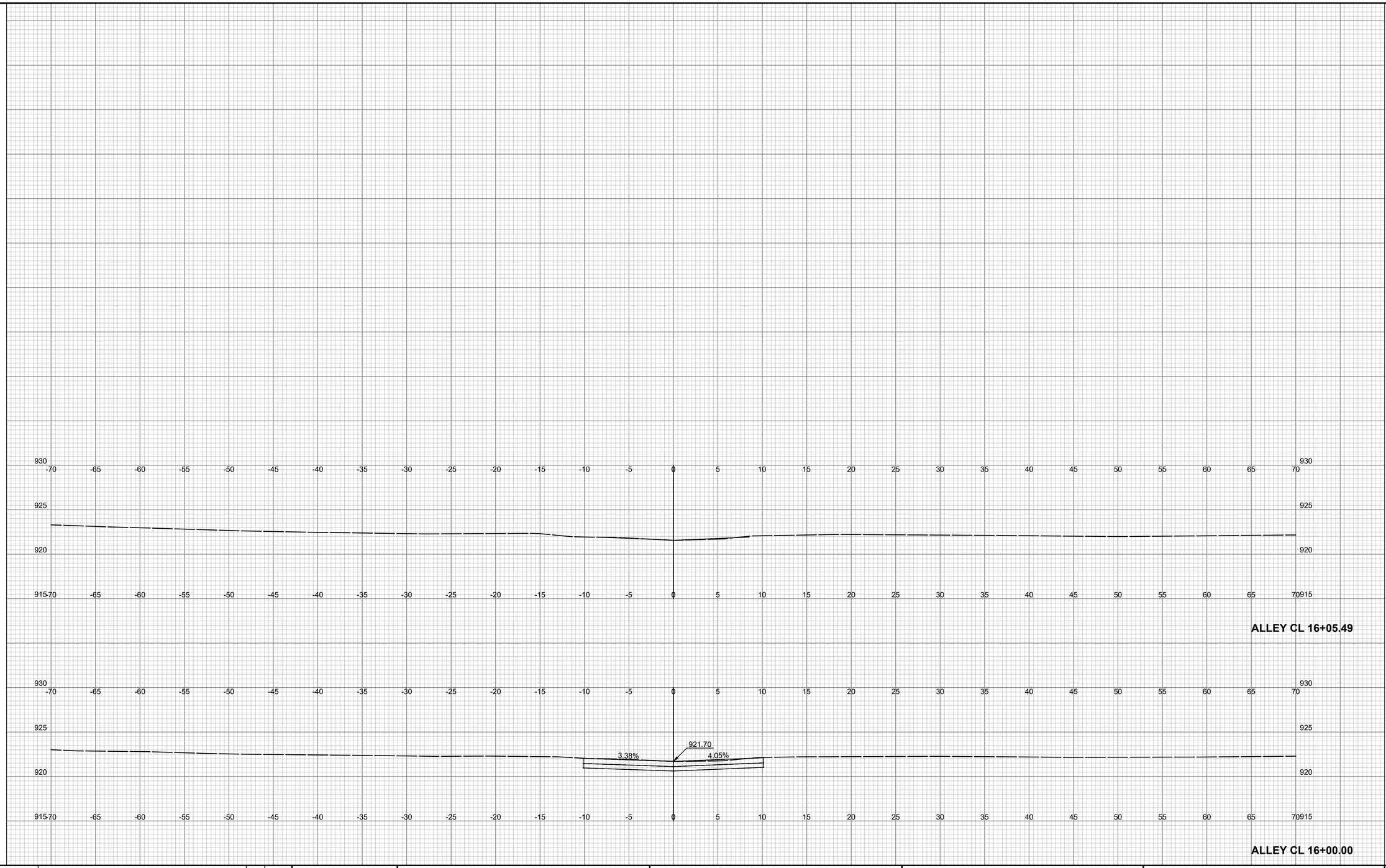
SANITARY SEWER PROJECT NO. 291128.10

CROSS SECTIONS

STA. 15+00.00 TO STA. 15+75.00

DATE: FEBRUARY 2026
SHEET: 35 OF 36
PROJ.: 841201.02/281250.18/291128.10
PEC#: 221114-000



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WATERLINE PROJECT NO. 281250.18
SANITARY SEWER PROJECT NO. 291128.10

CROSS SECTIONS

STA. 16+00.00 TO STA. 16+05.49

DATE: FEBRUARY 2026
SHEET: 36 OF 36
PROJ.: 841201.02/281250.18/291128.10
PEC#: 221114-000