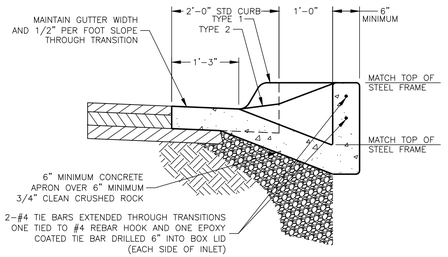
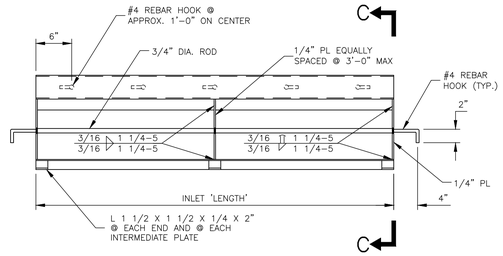
CURB INLET GENERAL NOTES

1. STANDARD DRAWINGS SHALL APPLY ONLY TO STRUCTURES WITHIN THE FOLLOWING LIMITS:
   A. INSIDE PLAN DIMENSIONS SHALL NOT EXCEED 40 SQUARE FEET.
   B. WALL HEIGHT SHALL NOT EXCEED 10 VERTICAL FEET..
2. THE MINIMUM WIDTH OF ALL STRUCTURES SHALL BE 4 FEET OR AS REQUIRED FOR PIPE CLEARANCE.
3. STEPS ARE REQUIRED IN ALL STRUCTURES WITH WALL HEIGHT GREATER THAN 4 FEET.
4. FRAMES, LIDS, CASTINGS, STEPS, INVERT, SUBSURFACE DRAINS, PIPE CONNECTIONS AND OTHER ITEMS SHOWN SHALL BE CONSIDERED SUBSIDIARY TO EACH STANDARD STRUCTURE.
5. SUBSURFACE DRAINS ARE REQUIRED IN ALL STRUCTURES IN THE PUBLIC RIGHT-OF-WAY WITH WALL HEIGHT GREATER THAN 3 FEET. ONE DRAIN PER WALL SHALL BE INSTALLED ONLY IN WALLS WHICH ARE PERPENDICULAR TO THE STREET CENTERLINE.
6. CURB INLETS WITH INSIDE PLAN DIMENSIONS EXCEEDING 25 SQUARE FEET SHALL HAVE TYPE II RING AND COVER. CURB INLETS IN PAVED AREAS SHALL HAVE TYPE II RING AND COVER.
7. WHERE SIDEWALKS ADJOIN STORM SEWER STRUCTURES, #4 EPOXY COATED TIE BARS SHALL BE PLACED 18" ON CENTER. TIE BARS SHALL BE 18" LONG WITH 6" IN THE STRUCTURE TOP, THROUGH ISOLATION JOINT.
8. CURB INLET DIMENSIONS SHALL BE STATED AS 'LENGTH' x 'WIDTH' ON ALL CONSTRUCTION NOTES.
9. THE MINIMUM LENGTH OF CURB INLET OPENING SHALL BE 5 FEET.
10. CURB INLET FRAME TOP CHANNEL SHALL BE FABRICATED FROM 0.15 MAX. CARBON, FORMING QUALITY, OR A36 HOT ROLLED STEEL PLATE.
11. ALL FLAT PLATE AND RODS SHALL BE M1020 MERCHANT QUALITY OR A36 HOT ROLLED STEEL.
12. ALL CURB INLET FRAME MATERIALS SHALL BE FREE FROM RUST AND MILL SCALE.
13. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF THE AWS "STRUCTURAL WELDING CODE."
14. CURB INLET FRAMES SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION PER ASTM A123.
15. CURB INLET FRAMES SHALL BE SLOPED TO MATCH THE STREET CENTERLINE GRADE.
16. STAMPING TOOLS SHALL BE APPROVED PRIOR TO USE. A FULL SIZE FABRICATION PATTERN MAY BE OBTAINED FROM THE MUNICIPAL SERVICES AND OPERATIONS DEPARTMENT. FOR CAST-IN-PLACE INLETS, A STAMPING TOOL MAY BE BORROWED FROM THE DEPARTMENT PER AN APPROVED SCHEDULE.
17. ALL DIMENSIONS AND SIDE SLOPES SHOWN WITHIN THE "TYPICAL TRENCH SECTION DETAILS" ARE TYPICAL. ANY DEVIATION FROM THESE DIMENSIONS MUST BE APPROVED BY THE PROJECT ENGINEER PRIOR TO BEGINNING THE TRENCHING WORK, OR AS SOON AS PRACTICABLE.
18. FLOWABLE FILL QUANTITY IS CALCULATED BASED ON A TYPICAL TRENCH SIDE SLOPE OF 1:1. A SIDE SLOPE FLATTER THAN 1:1 (IF REQUIRED TO ENSURE STABILITY AND SAFETY OF THE TRENCHES) MUST BE APPROVED BY THE PROJECT ENGINEER IN THE FIELD PRIOR TO BEGINNING EXCAVATION FOR TRENCHES, OR AS SOON AS PRACTICABLE. THE INTENT IS TO KEEP THE FLOWABLE FILL QUANTITY TO A MINIMUM.
19. FLOWABLE FILL SHALL BE PLACED TO BOTTOM OF THE PAVEMENT, STABILIZED BASE, OR GRANULAR BASE AS DIRECTED BY ENGINEER.
20. CONCRETE FOR INVERT AND COLLARS SHALL MEET CITY SPECIFICATIONS SECTION 2000 – CONCRETE
21. LIFT HOLES IN PRE-CAST STRUCTURES SHALL BE PATCHED WITH NON-SHRINK GROUT.



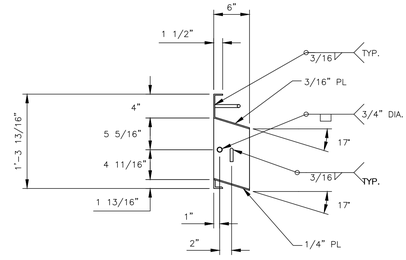
SECTION A–A

CURB TRANSITION

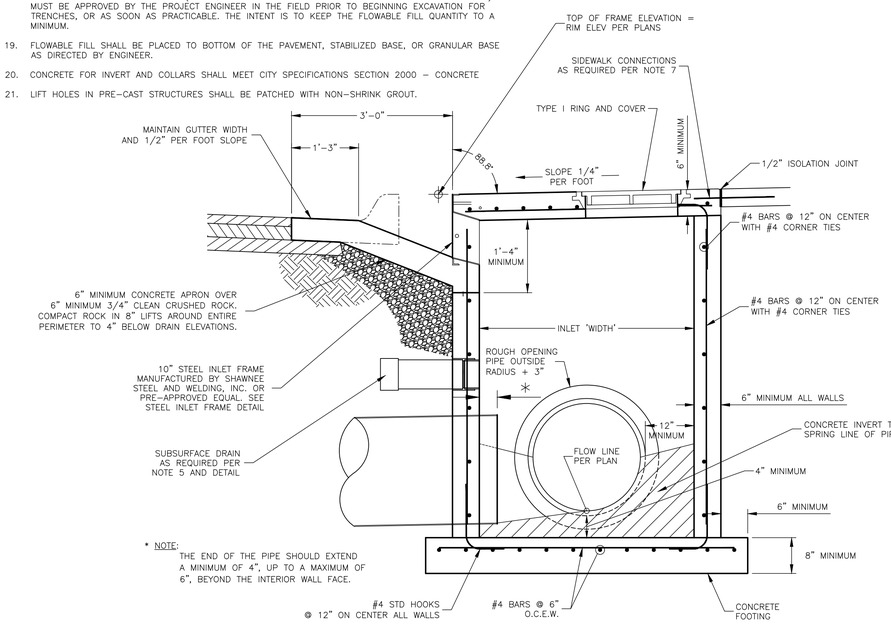


FRONT VIEW

STEEL INLET FRAME

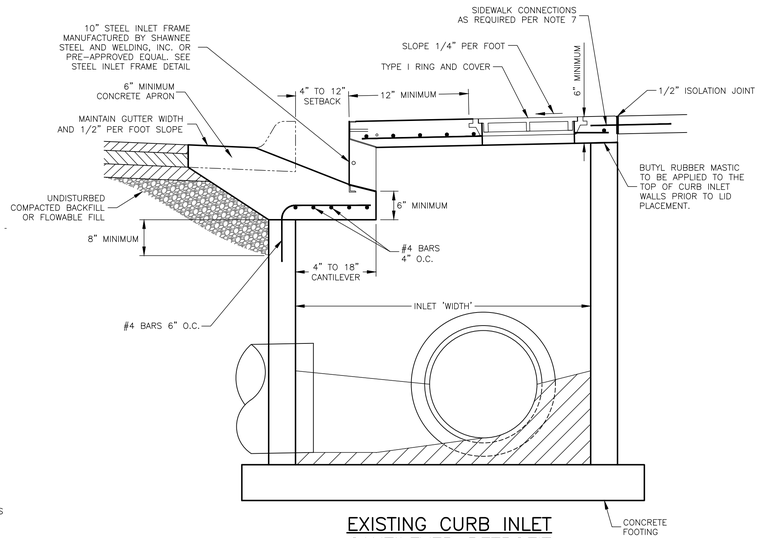


SECTION C–C

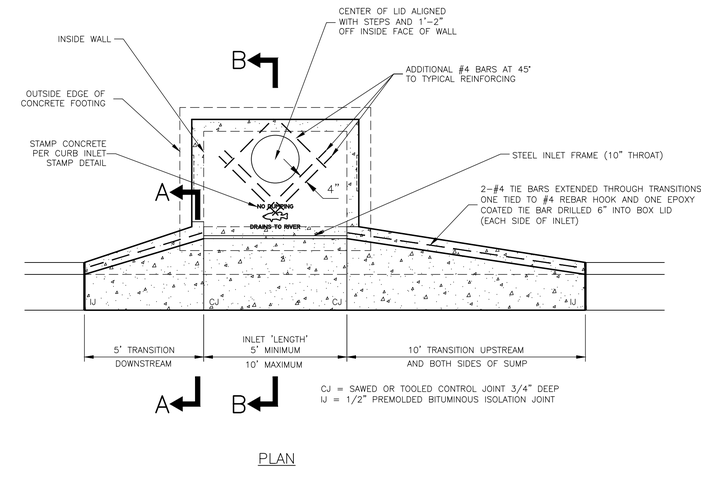


* NOTE:
THE END OF THE PIPE SHOULD EXTEND A MINIMUM OF 4", UP TO A MAXIMUM OF 6", BEYOND THE INTERIOR WALL FACE.

SECTION B–B



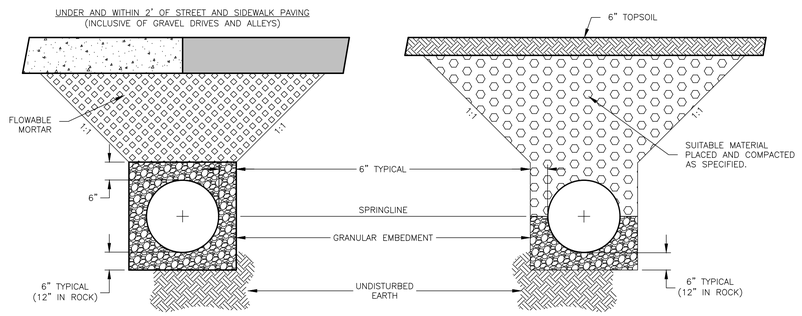
EXISTING CURB INLET CANTILEVER RETROFIT



CJ = SAWED OR TOOLED CONTROL JOINT 3/4" DEEP
IJ = 1/2" PREMOLDED BITUMINOUS ISOLATION JOINT

PLAN

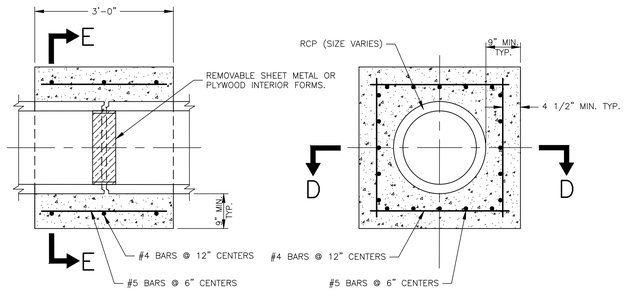
STANDARD CURB INLET



UNDER AND WITHIN 2' OF STREET AND SIDEWALK PAVING

OUTSIDE PAVEMENT

TYPICAL TRENCH SECTIONS

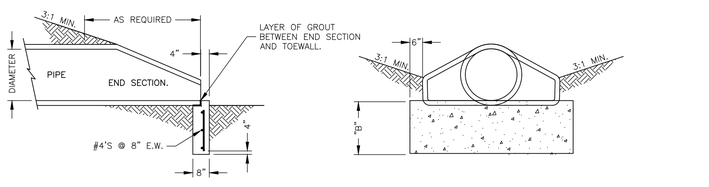


SECTION D–D

SECTION E–E

CONCRETE COLLAR

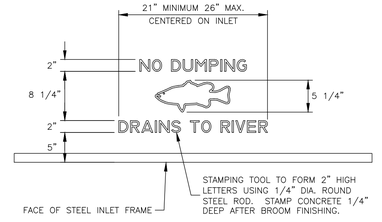
NOTE: ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS AT 3'-0" MAXIMUM SPACING.



SIDE VIEW

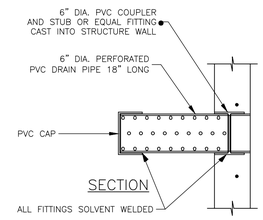
FRONT VIEW

STANDARD END SECTION



PLAN

CURB INLET STAMP



SUBSURFACE DRAIN

2024 EDITION

SHEET _____ OF _____

DATE	BY	REVISION
04-01-24	LJM	REPLACES ALL PREVIOUS VERSIONS OF STORM SEWER CURB INLET DETAILS
04-01-23	LJM	REPLACES ALL PREVIOUS VERSIONS OF STORM SEWER CURB INLET DETAILS

Lawrence KANSAS

STANDARD DETAILS FOR
STORM SEWER CURB INLETS

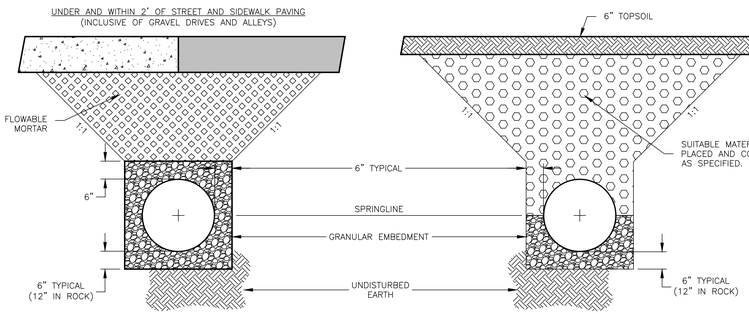
1 OF 2

DAVID P. CRONIN
CITY ENGINEER

CRAIG S. OWENS
CITY MANAGER

JUNCTION BOX GENERAL NOTES

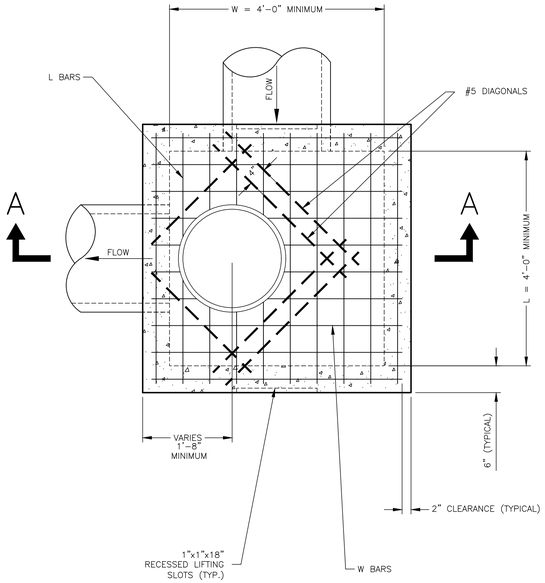
1. STANDARD DRAWINGS SHALL APPLY ONLY TO STRUCTURES WITHIN THE FOLLOWING LIMITS:
   A. INSIDE PLAN DIMENSIONS SHALL NOT EXCEED 40 SQUARE FEET.
   B. WALL HEIGHT SHALL NOT EXCEED 10 VERTICAL FEET.
2. THE MINIMUM WIDTH OF ALL STRUCTURES SHALL BE 4 FEET OR AS REQUIRED FOR PIPE CLEARANCE.
3. STEPS ARE REQUIRED IN ALL STRUCTURES WITH WALL HEIGHT GREATER THAN 4 FEET.
4. FRAMES, LIDS, CASTINGS, STEPS, INVERT, SUBSURFACE DRAINS, PIPE CONNECTIONS AND OTHER ITEMS SHOWN SHALL BE CONSIDERED SUBSIDIARY TO EACH STANDARD STRUCTURE.
5. SUBSURFACE DRAINS ARE REQUIRED IN ALL STRUCTURES IN THE PUBLIC RIGHT-OF-WAY WITH WALL HEIGHT GREATER THAN 3 FEET. ONE DRAIN PER WALL SHALL BE INSTALLED ONLY IN WALLS WHICH ARE PERPENDICULAR TO THE STREET CENTERLINE.
6. JUNCTION BOXES WITH INSIDE PLAN DIMENSIONS EXCEEDING 25 SQUARE FEET SHALL HAVE TYPE II RING AND COVER. JUNCTION BOXES IN PAVED AREAS SHALL HAVE TYPE II RING AND COVER.
7. NO JUNCTION BOX TO BE LOCATED IN PAVEMENT WITHOUT APPROVAL OF THE CITY ENGINEER.
8. ALL FLAT PLATE AND RODS SHALL BE M1020 MERCHANT QUALITY OR A36 HOT ROLLED STEEL.
9. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF THE AWS "STRUCTURAL WELDING CODE."
10. STAMPING TOOLS SHALL BE APPROVED PRIOR TO USE. A FULL SIZE FABRICATION PATTERN MAY BE OBTAINED FROM THE MUNICIPAL SERVICES AND OPERATIONS DEPARTMENT. FOR CAST-IN-PLACE INLETS, A STAMPING TOOL MAY BE BORROWED FROM THE DEPARTMENT PER AN APPROVED SCHEDULE.
11. ALL DIMENSIONS AND SIDE SLOPES SHOWN WITHIN THE "TYPICAL TRENCH SECTION DETAILS" ARE TYPICAL. ANY DEVIATION FROM THESE DIMENSIONS MUST BE APPROVED BY THE PROJECT ENGINEER PRIOR TO BEGINNING THE TRENCHING WORK, OR AS SOON AS PRACTICABLE.
12. FLOWABLE FILL QUANTITY IS CALCULATED BASED ON A TYPICAL TRENCH SIDE SLOPE OF 1:1. A SIDE SLOPE FLATTER THAN 1:1 (IF REQUIRED TO ENSURE STABILITY AND SAFETY OF THE TRENCHES) MUST BE APPROVED BY THE PROJECT ENGINEER IN THE FIELD PRIOR TO BEGINNING EXCAVATION FOR TRENCHES, OR AS SOON AS PRACTICABLE. THE INTENT IS TO KEEP THE FLOWABLE FILL QUANTITY TO A MINIMUM.
13. FLOWABLE FILL SHALL BE PLACED TO BOTTOM OF THE PAVEMENT, STABILIZED BASE, OR GRANULAR BASE AS DIRECTED BY ENGINEER.
14. CONCRETE FOR INVERTS AND COLLARS SHALL MEET CITY SPECIFICATIONS SECTION 2000 – CONCRETE
15. LIFT HOLES IN PRE-CAST STRUCTURES SHALL BE PATCHED WITH NON-SHRINK GROUT.



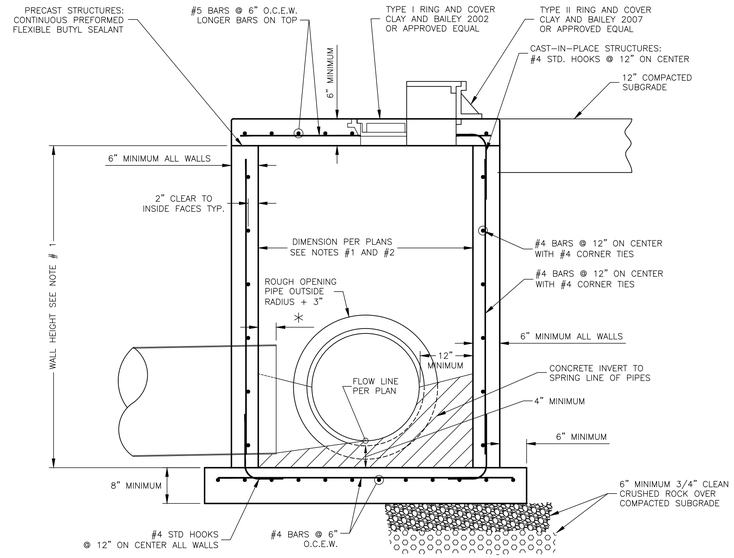
UNDER AND WITHIN 2' OF STREET AND SIDEWALK PAVING

OUTSIDE PAVEMENT

TYPICAL TRENCH SECTIONS



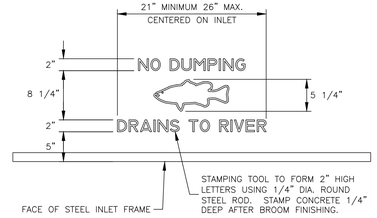
PLAN



* NOTE:
THE END OF THE PIPE SHOULD EXTEND A MINIMUM OF 4", UP TO A MAXIMUM OF 6", BEYOND THE INTERIOR WALL FACE.

TYPICAL SECTION A-A

STANDARD JUNCTION BOX



PLAN

JUNCTION BOX STAMP

2024 EDITION

SHEET _____ OF _____

DATE	BY	REVISION
04-01-24	LJM	REPLACES ALL PREVIOUS VERSIONS OF STORM SEWER JUNCTION BOX DETAILS
04-01-23	LJM	REPLACES ALL PREVIOUS VERSIONS OF STORM SEWER JUNCTION BOX DETAILS

Lawrence KANSAS

STANDARD DETAILS FOR
STORM SEWER JUNCTION BOXES

2 OF 2

DAVID P. CRONIN
CITY ENGINEER

CRAIG S. OWENS
CITY MANAGER