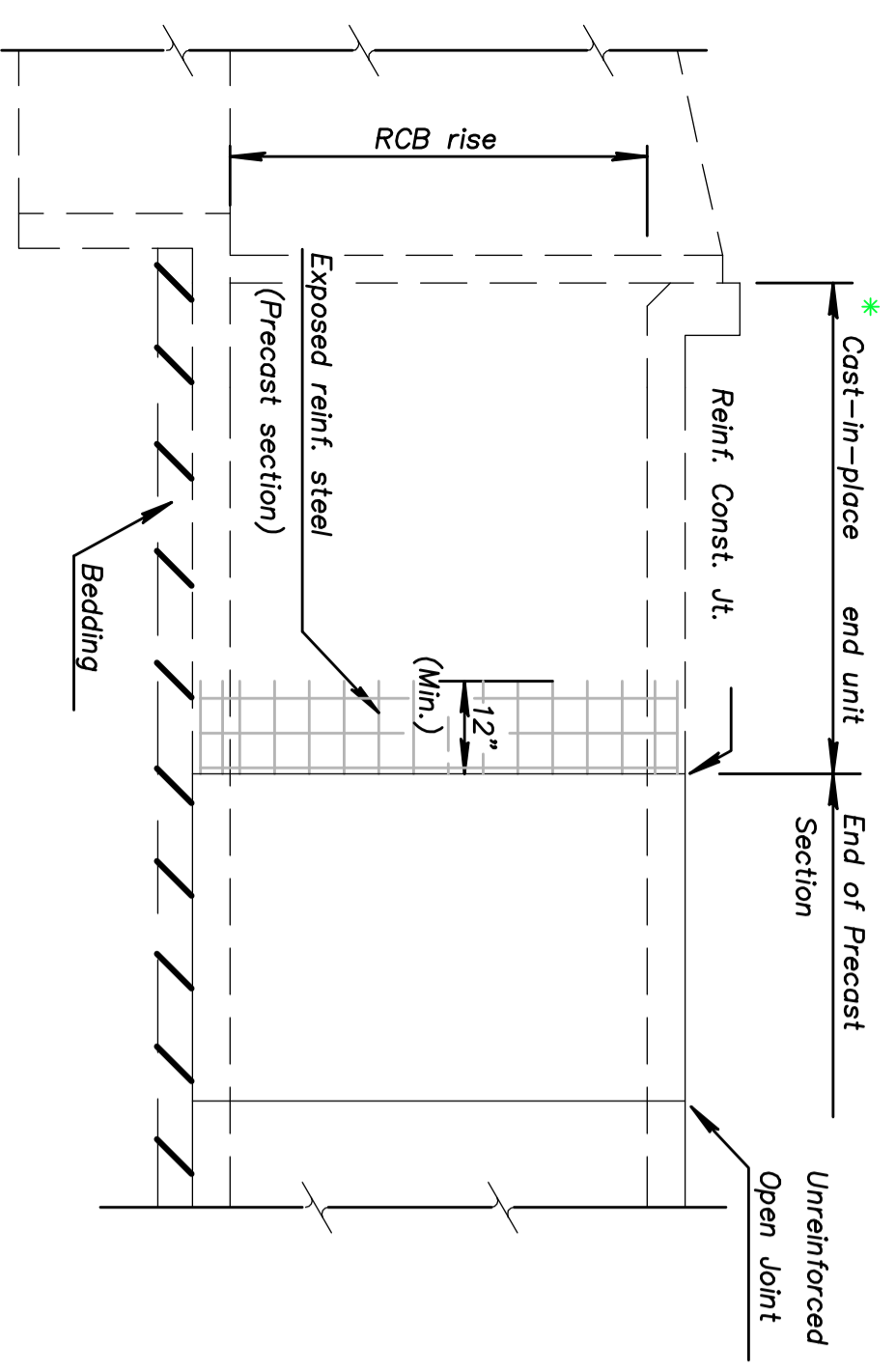


FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	468-84395	2001	24	51

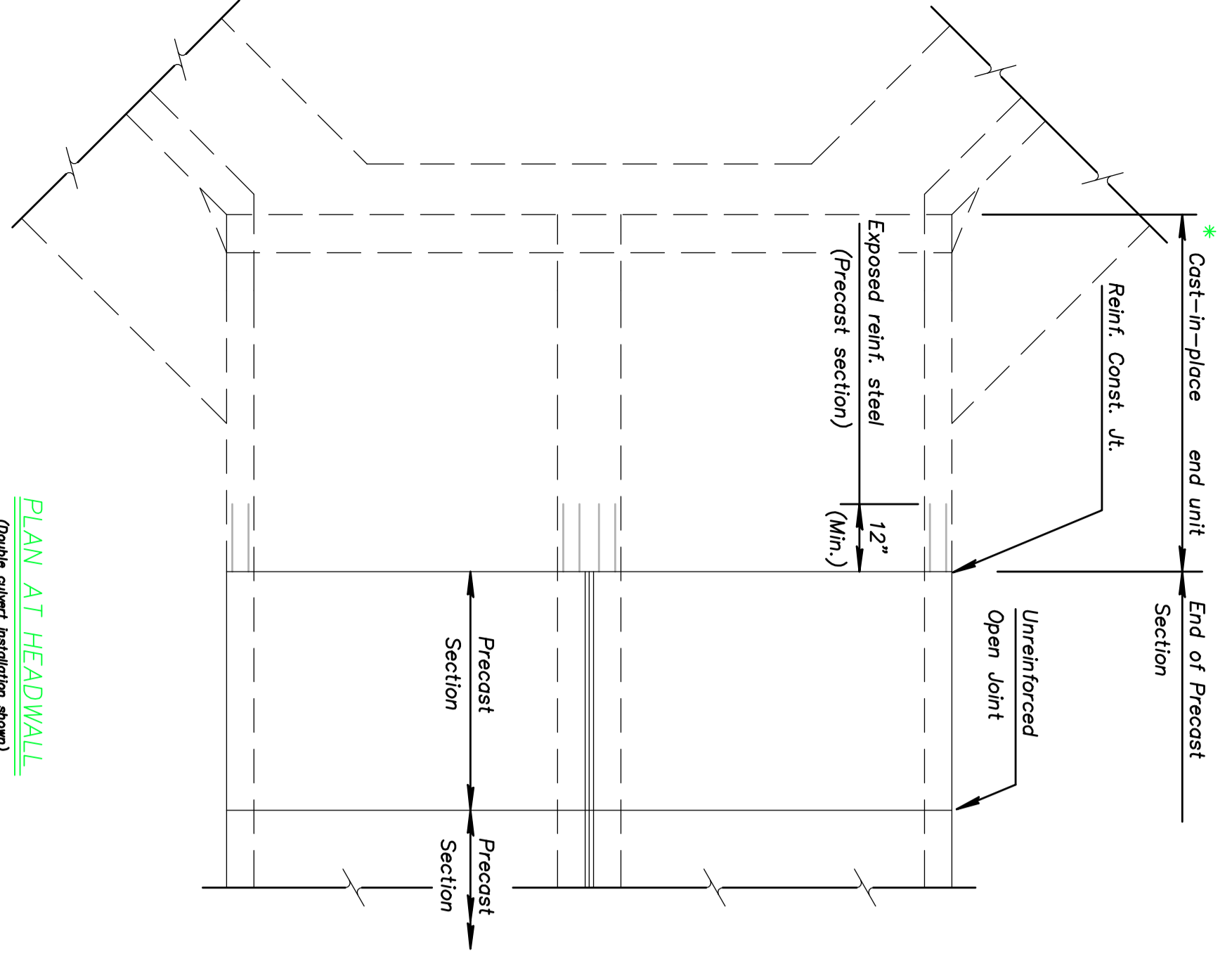
STONE MASONRY DETAIL

All costs associated with stone masonry shall be incidental to 4x10'x5' RCBC.



ELEVATION AT HEADWALL

* Minimum barrel length of cast-in-place end unit shall equal the RCB rise or 8'-0", whichever is less. This length can be used when the joint between the cast-in-place end unit and the pre-cast section is reinforced as shown.



PLAN AT HEADWALL
(Double culvert installation shown)

NOTE: Minimum length of precast section shall be 4'-0".

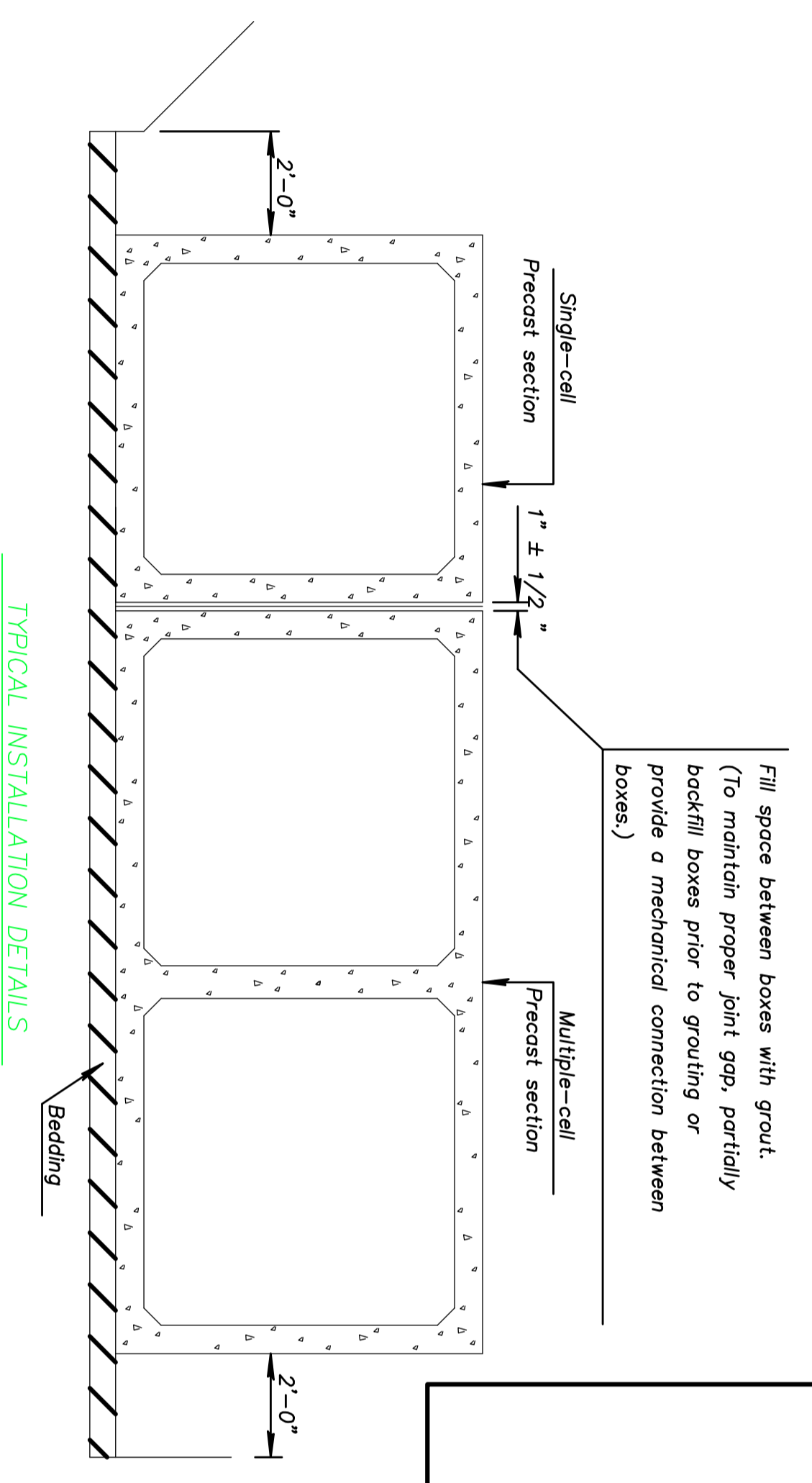
GENERAL NOTES

PRECAST BOX CULVERTS: If precast boxes are specified, construct them at the locations shown in the plans and according to the requirement shown on this sheet. When approved by the Engineer, precast box culverts may be used in lieu of cast-in-place box culverts. If the Contractor chooses the precast option, use the cast-in-place quantities as the cost base. This cost includes all labor, equipment, material and overheads necessary to complete the installation.

Cast-in-place concrete work shall conform to the requirements of the KDOT Standard Specifications for Structural Steel Reinforced Concrete Box Culverts and Table 60 reinforcing steel conforming to ASTM A615M for cast-in-place construction.

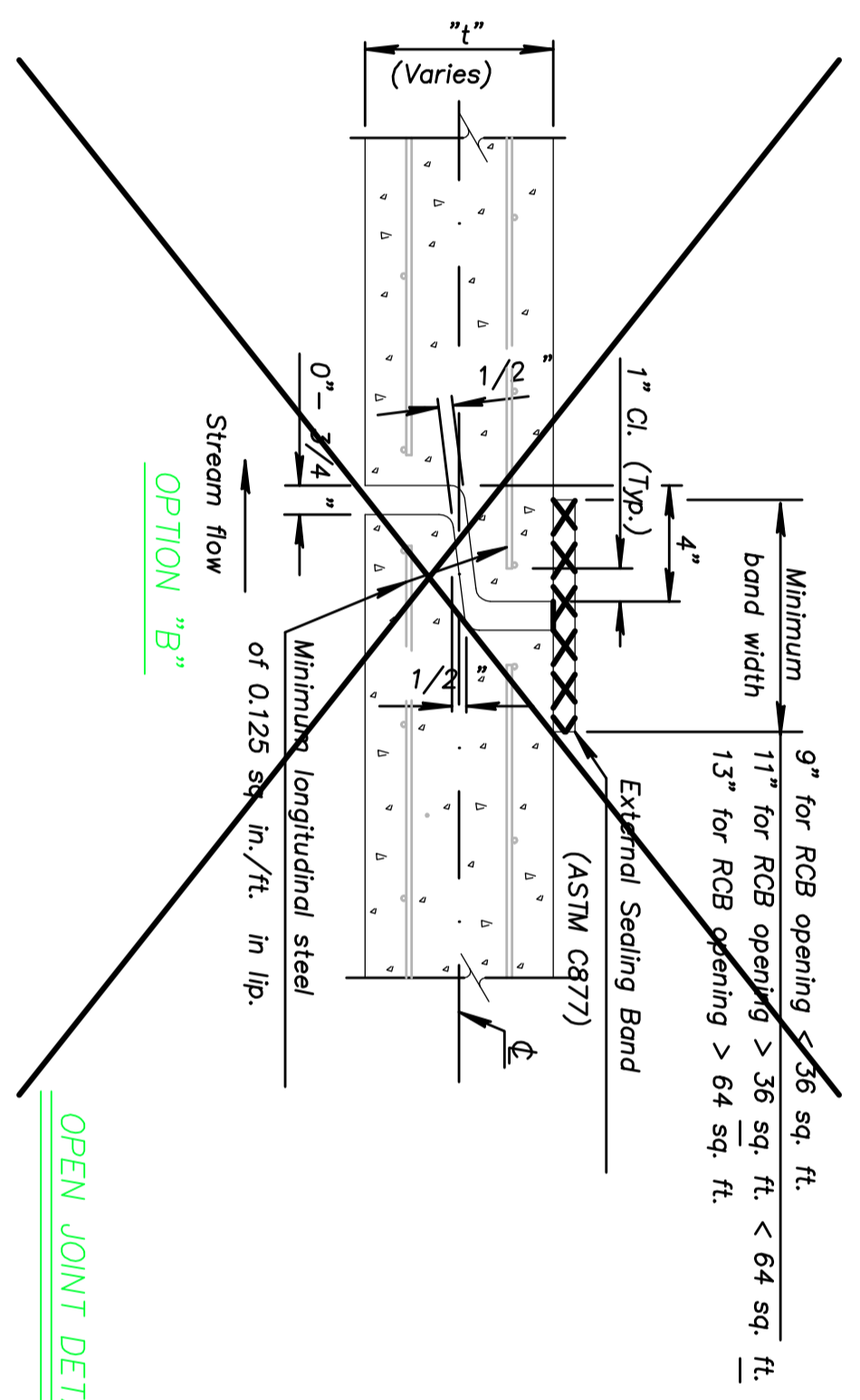
SPECIFICATIONS: Single-cell Precast Concrete Box Culverts shall conform to the requirements of the following specifications except as noted in the KDOT Specifications. Design multiple-cell precast boxes in accordance with the criteria used to design the single-cell precast boxes. (See Appendix of ASTM Specification C 1433, Table 2 and the latest AASHTO Specifications.)

DISTRIBUTION SLABS: Fill heights less than 2 feet require a distribution slab. Precast distribution slabs may be used for fill heights over 1 foot, otherwise use cast-in-place.



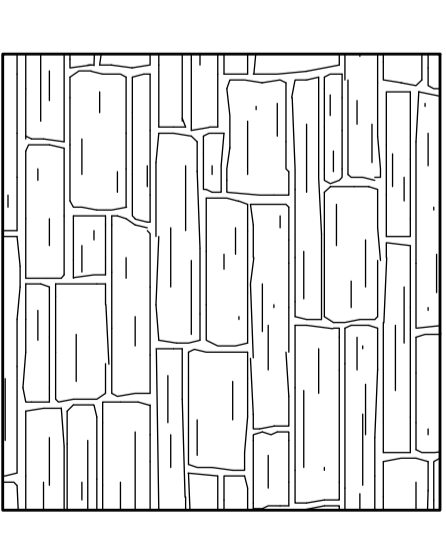
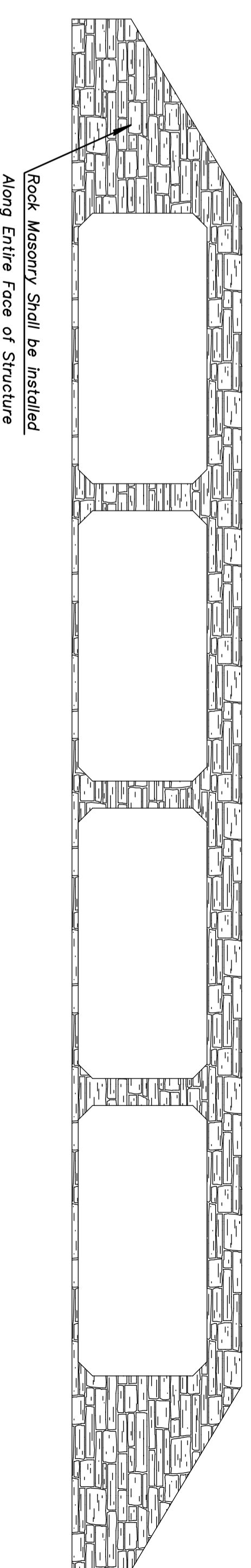
TYPICAL INSTALLATION DETAILS

Fill space between boxes with grout. (To maintain proper joint gap, partially backfill boxes prior to grouting or provide a mechanical connection between boxes.)



OPEN JOINT DETAIL

Minimum 9" for RCB opening < 36 sq. ft.
1 1/2" for RCB opening > 36 sq. ft. < 64 sq. ft.
1 3/4" for RCB opening > 64 sq. ft.

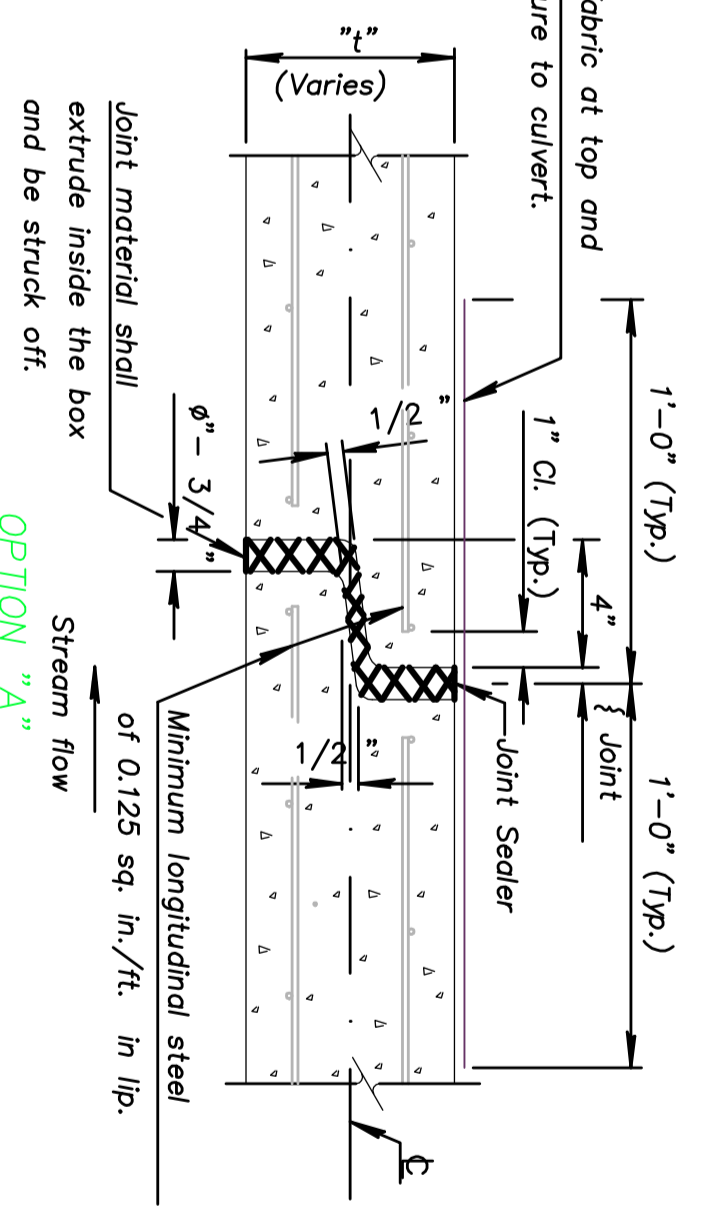


Rock Masonry Shall be installed Along Entire Face of Structure

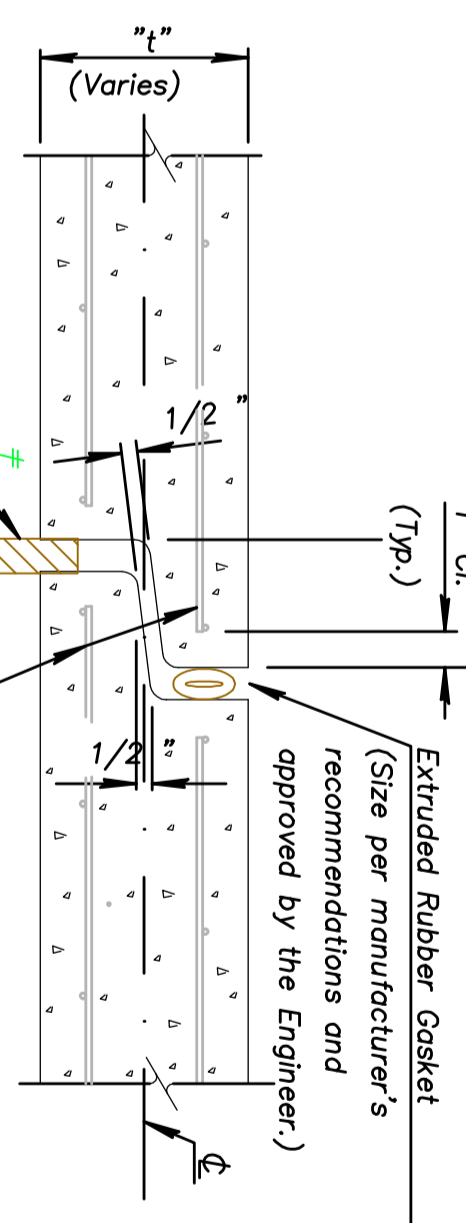
STONE VENEER
Supplier: Sunset Stone
Contact: Kansas Building Products
Phone Number: (316) 943-3241
Type: Moss Rock
Finish: Ledge / Sienna Mix

GROUT:
Color to Be Determined in the Field By Landscape Architect

Stone Masonry Cap
Maintain a Relative Flush Edge on the Front and Back Sides of the Stone Cap. Mortar Joints Shall Be Randomly Spaced and Irregular. Mortar Joints Shall Have a 1/4" to 3/8" Spacing. Rake with a Steel Brush.

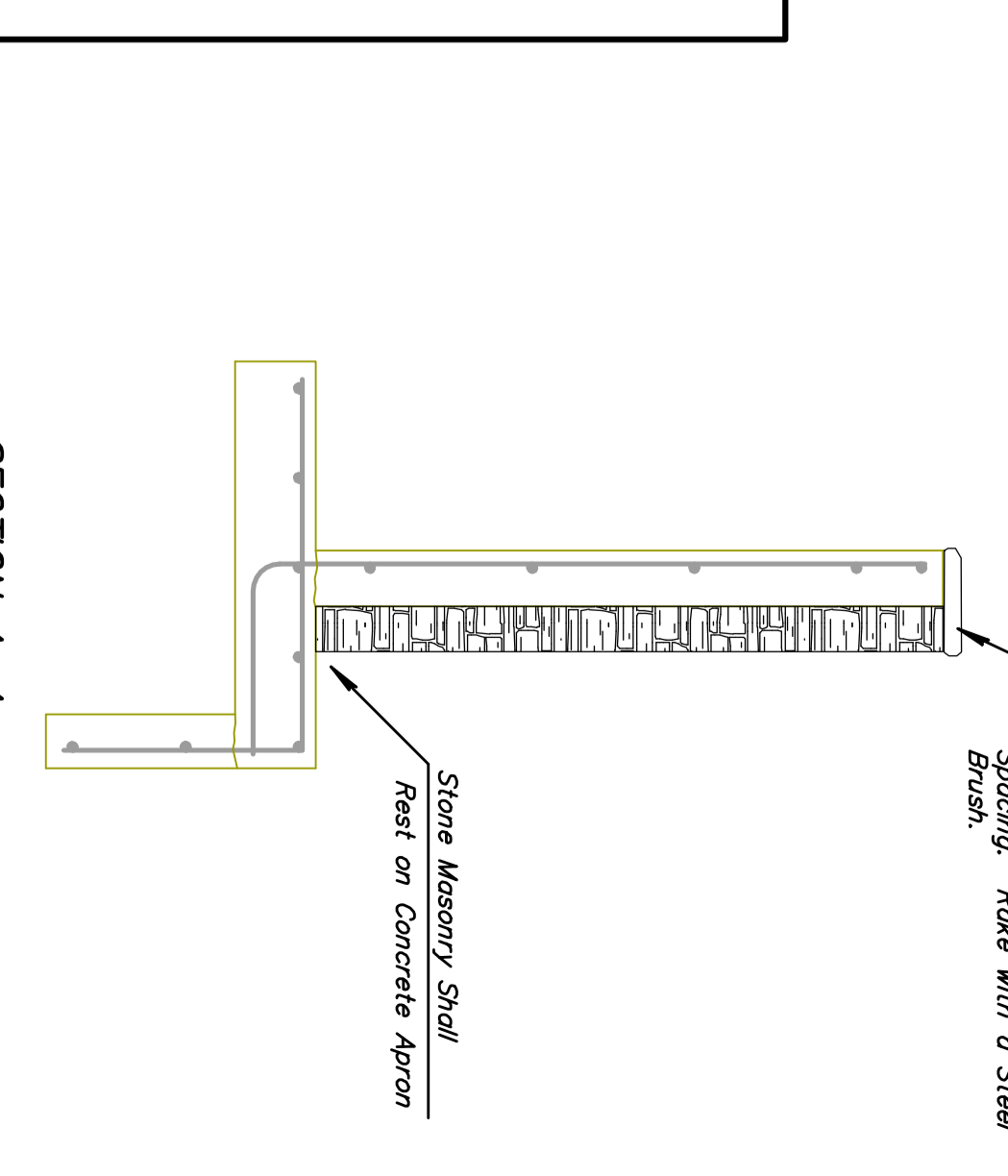


OPTION "A"



OPTION "B"

Minimum longitudinal steel of 0.125 sq. in./ft. in lip.



SECTION A-A

REVISED 10/09/01

NO.	DATE	REVISIONS	BY	APP'D
4	11-03-00	Revised ASTM / Added Note	RAM	KFH
3	12-20-96	Revised CIP end unit details.	RAM	KFH
2	1-17-95	Revised general notes	LRR	KFH
1	6-22-94	Added option - C, & revised notes	RAM	KFH
ND				APP'D

KANSAS DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT DETAILS

STONE VENEER DETAIL

FHWA ABBREVIATION	DATE	DESIGNED BY	CHECKED BY	APP'D BY
BR031	11-27-00	APP'D D	KENNETH F. HURST	
DESIGNED	DETAILED	QUANTITIES	CADD	
DESIGN CK.	DETAIL CK.	RAM/OLAN	CK.	CADD CK.