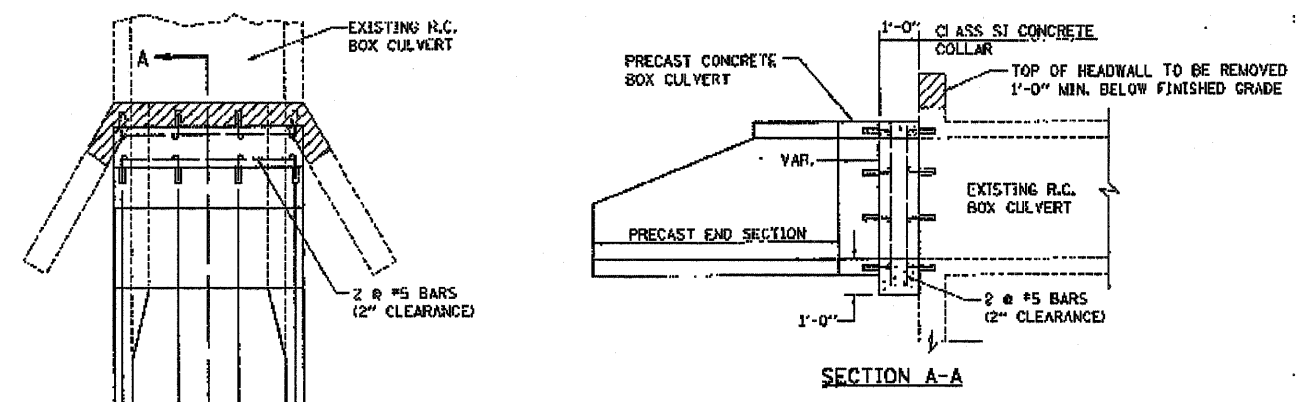


FOR INFORMATION ONLY

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	121	LIVINGSTON	27	21



PLAN VIEW

LEGEND

CONCRETE REMOVAL LIMITS

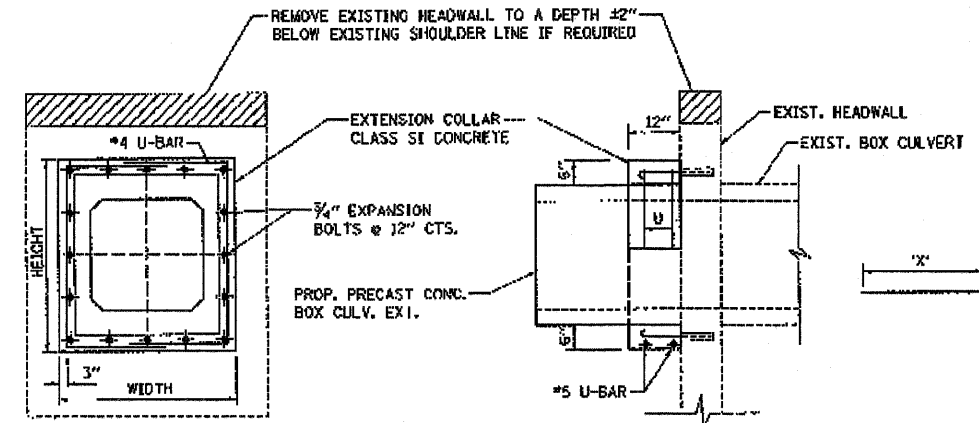
EXPANSION BOLTS, 3/4"

SEE GENERAL NOTE #2)

GENERAL NOTES

- 1.) CLASS SI CONCRETE SHALL BE USED THROUGHOUT. THE INSIDE DIMENSIONS OF THE CLASS SI CONCRETE COLLAR SHALL BE THE SAME AS THE NEW PRECAST CONCRETE BOX CULVERT.
- 2.) EXPANSION BOLTS, 3/4" SHALL BE PLACED IN EACH CORNER AND SHALL ALSO BE PLACED AT 18" MAXIMUM CENTERS.
- 3.) 3/4" EXPANSION BOLTS AND REINFORCEMENT BARS SHALL BE INCIDENTAL. THE CONCRETE REMOVAL AND THE PRECAST CONCRETE BOX CULVERTS WILL BE PAID FOR AS SPECIFIED ELSEWHERE.
- 4.) CLASS SI CONCRETE COLLARS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR CONCRETE COLLARS INCLUDING ALL LABOR AND MATERIAL AS SPECIFIED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

**DETAIL OF CONCRETE COLLARS
USED WITH PRECAST BOX CULVERTS**



EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA. HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS. MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS.

BOX CULVERT EXTENSION DETAIL (COLLAR) (EACH)

FOR INFORMATION ONLY

QUANTITIES ARE FOR CONCRETE COLLAR - 1 EACH

LOCATION	EXISTING CULVERT SIZE FT.xFT.	PRECAST CULVERT EXTENSION FT.xFT.	EXTENSION COLLAR		#5 U-BAR		CLASS SI CONC. HDWL. CU. YD.	INCIDENTAL	
			WIDTH IN.	HEIGHT IN.	'X' IN.	'Y' IN.		REINFORCEMENT BARS POUND	3/4" DIA. EXPANSION BOLTS EACH
LT. STA. 132+53	3x2	3x2	44	44	29	38	0.3	34	10
RT. STA. 132+53	3x2	3x2							
LT. STA. 177+99	3x2	3x2							
RT. STA. 177+99	3x2	3x2							
LT. STA. 207+00	3x2	3x2							
RT. STA. 207+00	3x2	3x2							
LT. STA. 218+34	3x2	3x2							
RT. STA. 218+34	3x2	3x2							
LT. STA. 320+95	4x3	4x3	58	58	36	52	0.4	44	14
RT. STA. 320+95	4x3	4x3							
LT. STA. 345+98	3x2	3x2							
RT. STA. 345+98	3x2	3x2							
LT. STA. 376+05	6x3	6x3	86	62	50	56	0.7	54	18
RT. STA. 376+05	6x3	6x3							

GREENE & BRADFORD, INC.
OF ILLINOIS
REGISTERED PROFESSIONAL ENGINEERS
No. 00121200

COMPUTER FILE NO.
94093CCD - 10

**ILLINOIS DEPARTMENT OF TRANSPORTATION
PRECAST CONCRETE BOX CULVERT
COLLAR CONNECTION DETAILS**

FAP ROUTE 326 CL. RTE. 47
SECTION 120RS-3, (120, 121, 122RS-2
120BR, BR-1, BR-2) & 122BR-1
LIVINGSTON COUNTY

DRAWN BY: MCGRATH
DESIGNED BY: KUNTZMAN
CHECKED BY:

DATE: 4/24/95-MML