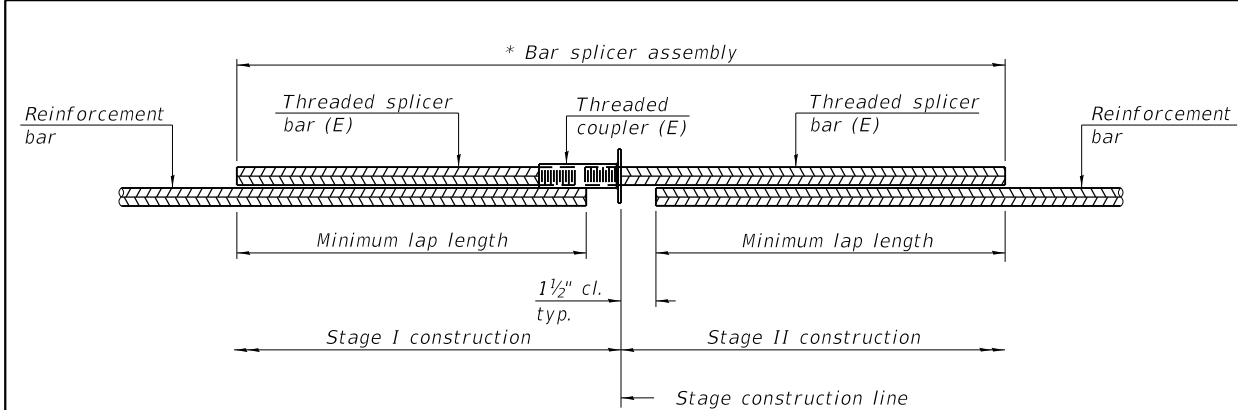


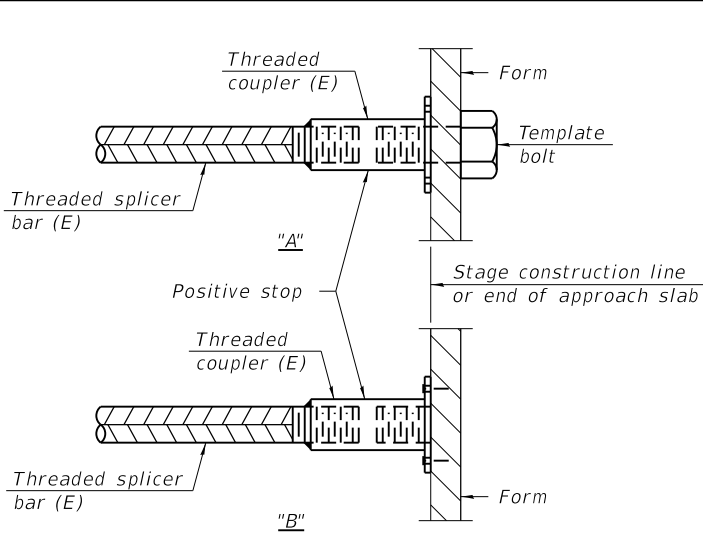


STANDARD BAR SPLICER ASSEMBLY PLAN
(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1½" + thread length

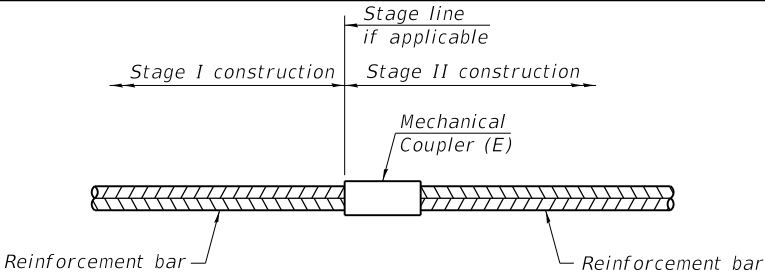
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Bottom Slab	#6	26	3'-10"
Top Slab	#6	26	3'-10"
Sidewalls	#4	16	2'-7"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

FILE NAME = SFILES
PLOT SCALE = 1:10000 / in.
USER NAME =

BSD-1

2-1-2023

1 REVISED SHEET 2/6/2026

GSG GSG CONSULTANTS, INC.
735 E. REMINGTON RD. SCHAUMBURG, IL 60173
TEL: +1630.994.2600 | WWW.GSG-CONSULTANTS.COM

USER NAME = CC	DESIGNED -	REVISED -
	DRAWN - CC	REVISED -
PLOT SCALE = 1"=2'	CHECKED - KZ	REVISED -
PLOT DATE = 09/27/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO. 049-0522

SCALE: 1"=2' SHEET NO. S-7 OF S-11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 CR	LAKE	58	39
CONTRACT NO. 62T82				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SOIL BORING LOG

Page 1 of 1

Date 4/23/24

ROUTE IL173 Rosecrans Road DESCRIPTION Culvert Boring LOGGED BY DF

SECTION FAP 0303 22 CR LOCATION IL 173 Over Unnamed Ditch, 0.5 mi East of IL 131(Green Bay Rd)

COUNTY Lake DRILLING RIG GEOPROBE HSA HAMMER TYPE HAMMER EFF (%) AUTO 101.6

STRUCT. NO.	049-0522	D	B	U	M	Surface Water Elev.	N/A	ft	D	B	U	M
Station	N/A	E	L	C	O	Stream Bed Elev.	N/A	ft	E	L	C	O
BORING NO.	CB-01	P	O	S	I	Groundwater Elev.:			P	O	S	I
Station	N/A	T	W	Qu	T	First Encounter	680.5	ft	H	S	Qu	T
Offset						Upon Completion	N/A	ft				
Ground Surface Elev.	701.48	(ft)	(/6")	(tsf)	(%)	After N/A Hrs.	N/A	ft	(ft)	(/6")	(tsf)	(%)
16.0 inches of Asphalt						SILTY CLAY (CL-ML), trace gravel, trace sand, Stiff to Hard, Brown and Gray, Moist (continued)						
700.15									7			
7.0 inches of Aggregate Base	699.56	12							10	5.0	17	
FILL: SILTY CLAY, trace gravel, trace sand, trace organics, Brown to Black, Moist		7		3					13	B		
		4										
		5				SILT (ML), occasional sand seams, Medium Dense, Gray, Moist	677.98		10			
		5	1.0	30					9		14	
		4	B						14			
		-5							-25			
		1				SILTY CLAY (CL-ML), trace gravel, occasional silt seams, Very Stiff to Hard, Dark Gray, Moist	675.48		3			
		1	1.0	21					6	2.1	14	
		1	B						6	B		
692.98		2							3			
SANDY SILT (MLS), trace gravel, Very Loose, Gray, Moist		1		18					7	3.3	19	
		2							11	B		
		-10							-30			
690.48		4							7			
SILTY CLAY (CL-ML), trace gravel, trace sand, Stiff to Hard, Brown and Gray, Moist		6	6.7	14					8	5.0	20	
		7	B						12	B		
		3				Pushed rock at 33.5 feet			5			
		6	4.2	22					7	3.8	20	
		7	B						48	B		
		-15							-35			
		4				Pushed rock at 36.0 feet			50/4			
		5	1.7	14						2.0	12	
		7	B							P		
		3							34			
		4	1.7	14					10	3.1	22	
		7	B						13	B		
		-20							-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 4/23/24

ROUTE IL173 Rosecrans Road DESCRIPTION Culvert Boring LOGGED BY DF

SECTION FAP 0303 22 CR LOCATION IL 173 Over Unnamed Ditch, 0.5 mi East of IL 131(Green Bay Rd)

COUNTY Lake DRILLING RIG GEOPROBE HSA HAMMER TYPE HAMMER EFF (%) AUTO 101.6

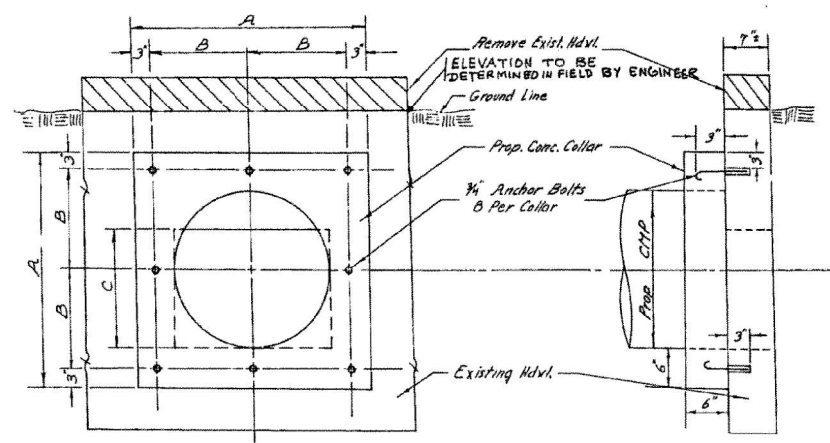
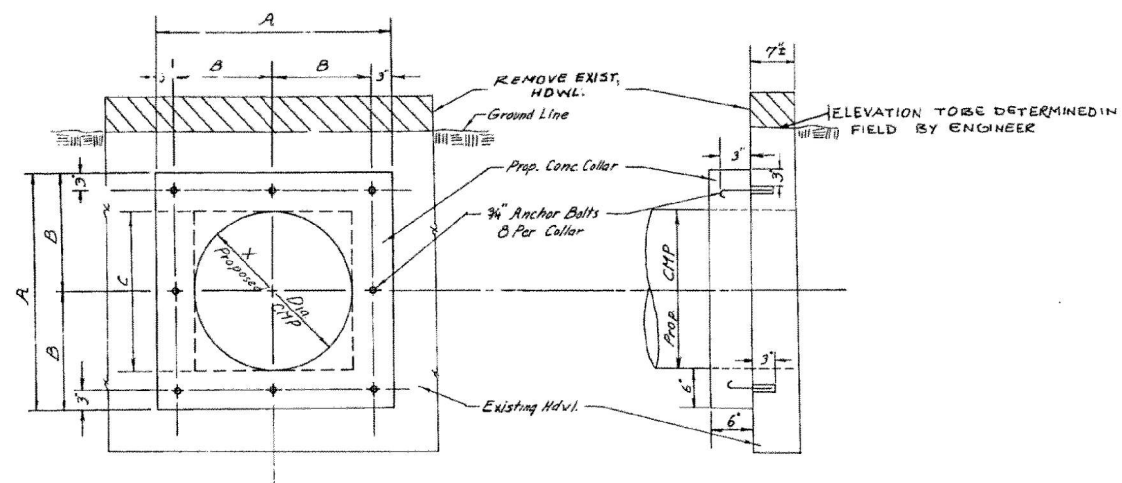
STRUCT. NO.	049-0522	D	B	U	M	Surface Water Elev.	N/A	ft	D	B	U	M
Station	N/A	E	L	C	O	Stream Bed Elev.	N/A	ft	E	L	C	O
BORING NO.	CB-02	P	O	S	I	Groundwater Elev.:			P	O	S	I
Station	N/A	T	W	Qu	T	First Encounter	680.6	ft	H	S	Qu	T
Offset						Upon Completion	N/A	ft				
Ground Surface Elev.	701.61	(ft)	(/6")	(tsf)	(%)	After N/A Hrs.	N/A	ft	(ft)	(/6")	(tsf)	(%)
16.0 inches of Asphalt												
700.28												
5.0 inches of Aggregate Base	699.86	4				SILT (ML), occasional sand seams, Loose to Medium Dense, Gray, Moist	680.61		3			
FILL: SILTY CLAY, trace gravel, trace sand, trace organics, Brown to Black, Moist		4		15					3		15	
		4	2.0									
		4	P									
		2							2			
		1	1.0	20					5		17	
		2	B						7			
		-5							-25			
695.61		5				SILTY CLAY (CL-ML), trace gravel, Very Stiff, Gray, Moist	675.61		5			
SILTY CLAY (CL-ML), trace gravel, Stiff to Hard, Brown and Gray, Moist		1	1.0	24					6	2.1	15	
		2	B						6	B		
		1										
		1	2.1	22		SANDY SILT (MLS), occasional clay seams, Medium Dense, Gray, Moist	673.11		7			
		2	B						8		12	
		-10							8			
		3							3			
		5	3.1	21					5		19	
		8	B						5			
		2				SILTY CLAY (CL-ML), occasional silt seams, Very Stiff, Brown to Gray, Moist	668.11		5			
		2	1.0	15					6	2.1	16	
		3	B						6	B		
		-15							-35			
		3							4			
		5	2.5	13					9	2.5	17	
		8	B						10	B		
		3							3			
		5	4.2	18					5	3.1	16	
		8	B						9	B		
		-20							-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

1 REVISED SHEET 2/6/2026

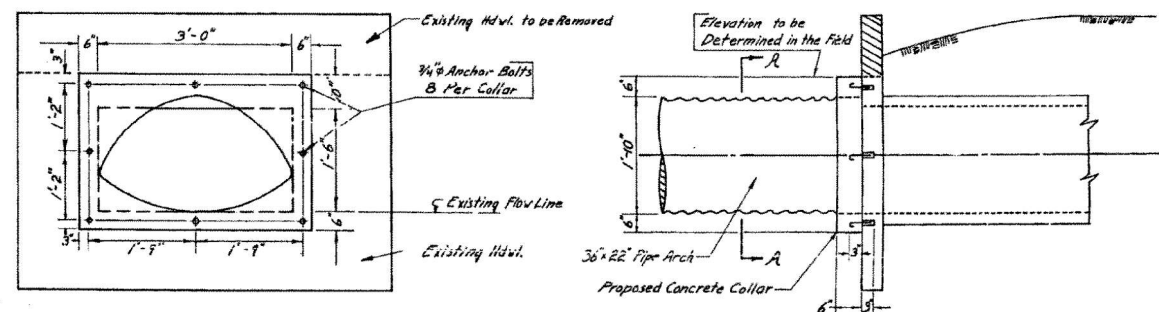
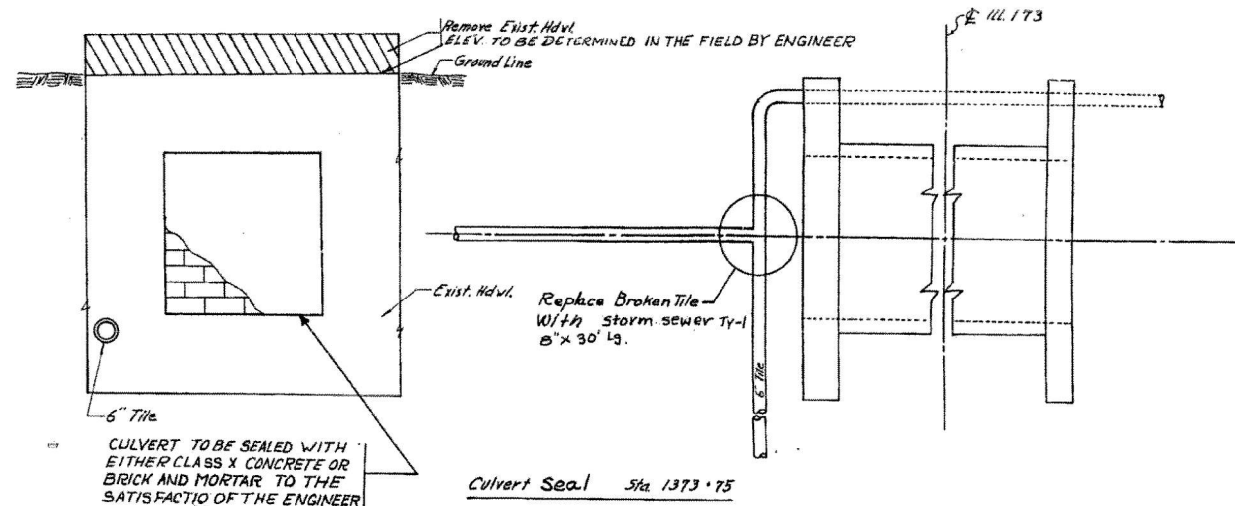
FOR INFORMATION ONLY



Dimensions & Quantities for Proposed Concrete Collars				
Collar				
Dia. of CMP	A	B	C	Cl. X Conc - Each
24"	3'-0"	1'-3"	2'-0"	0.109 cy.
24"	3'-0"	1'-3"	1'-6"	0.109 cy.

EXPANSION BOLTS SHALL CONSIST OF:
SELF-DRILLING EXPANSION SHIELDS
AND 3/8" DIA. HOOKED BOLTS. HOOKED BOLTS
SHALL BE EMBEDDED A MINIMUM OF 6" INTO
NEW CONCRETE.

DETAIL OF PROPOSED CONCRETE COLLARS FOR EXTENSION
OF EXISTING CULVERTS WITH PROPOSED CMP'S



Section A-A

Note: Class X Concrete - 0.120 cy.
Each Collar

Detail For Rectangular Box Culvert Extension

EXPANSION BOLTS SHALL CONSIST OF:
SELF-DRILLING EXPANSION SHIELDS
AND 3/8" DIA. HOOKED BOLTS. HOOKED BOLTS
SHALL BE EMBEDDED A MINIMUM OF 6" INTO
NEW CONCRETE.

DETAIL
CULVERT EXTENSION

ROUTE NO.	REC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA202	W	LAKE	58	47
FED. ROAD DIST. NO. 136 (WARS-1), 1966R				

USER NAME =	DESIGNED -	REVISED -
DRAWN - AC	REVISED -	
PLOT SCALE =	CHECKED - AAA	REVISED -
PLOT DATE =	DATE - 09/27/2024	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	FAP 0303 22 CR	LAKE	58	41
CONTRACT NO. 62T82				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				