

## **TERRESTRIAL CONNECTIVITY**

## Stream/River Crossing Survey

DATABASE ENTRY BY	ENTRY DATE
DATA ENTRY REVIEWED BY	REVIEW DATE

4	Crossing Code						Crossing CodeLocal ID (Optional)												
DAT.	Date Observed (00/00/0000)		L	ead Observer															
U	Town/County				Stre	eam/River													
NIS	Road										RAILROAD								
CROS	GPS Coordinates (Decimal degrees)				atitude		ONFA	AVED DI	NIVLWAI	°W Longitu									
	Location Description																		
	Crossing Type BRIDGE CULVER BURIED STREAM INACCESSIBLE							OSSING	Number of C	ulverts/Bridg	e Cells								
	Photo IDs INLET CONTEXTINLET APPROACHOUTLET CONTEXTOUTLET APPROACHOTHER																		
	Flow Condition NO FLOW TYP	ICAL-LOW	MODERAT	E HIGH	Tidal Si	te YES	NO	UNKNOWN											
	Road Fill Height (ft.) (Top of culvert to road surface; bridge = 0) Human Use of Crossing FREQUENT INFREQUENT NONE UNKNOWN																		
	Scour Pool Barrier NONE PART	IAL COM	MPLETE I	Livestock Usir	ng Crossing	YES	NO	UNKNOWN											
	Right of Way Fencing (Inlet Side)	ONE CHA	AIN LINK	WIRE MESH	BARBED	WIRE PC	ST AND CAB	LE OTHE	ER (DESCRIBE	BELOW)									
	Right of Way Fencing (Outlet Side)	ONE CHA	AIN LINK	WIRE MESH	BARBED	WIRE PC	ST AND CAB	LE OTHE	ER (DESCRIBE	BELOW)									
	Guide Fencing NONE INLET SIDE	ONLY C	OUTLET SIDE	ONLY BO	TH SIDES	Crossing Co	mments												
	Conditions that may Inhibit Wildlife from STEEP EMBANKMENT ROADWAY F JERSEY BARRIERS VERTICAL FACES HIGH TRAFFIC VOLUME (DESCRIBE RIG	ENCING RE	ETAINING WA TS	LLS NOIS															
	STRUCTURE 1																		
_	Outlet Shape 1 2 3 4	5 6 7	FORD	UNKNOWN	REMO\	/ED CLO	GGED/COLL	APSED/SUBMI	ERGED										
ATA	Outlet Dimensions (ft.) A. Width B. Height C. Substrate/Water Width D. Water Depth																		
	E. Abutment Height (Type 7 bridges only)	•	L. Struct	ure Length (O	verall length fro	m inlet to outlet	)												
C R	Inlet Shape 1 2 3	1 5	6 7	FORD	UNKNOWN	REMOVE	D CLOG	GED/COLLAF	PSED/SUBMER	RGED									
CT	Inlet Dimensions (ft.) A. Width	B. I	Height	·	C. Substrat	e/Water Wid	th		D. Water Dep	oth									
TRU	Clear Line of Sight Through Structure	YES	PARTIAL	NO Co	ntinuous Dry	/ Passage	YES PA	ARTIAL N	NO UNK	NOWN									
S	Miniumum Width of Dry Passage (ft.)		Min	iumum Heigh	it Above Dry	Passage (ft.)													
	Dry Passage Substrate SAND/SILT RIPRAP CONCRETE METAL						ucture Comr	nents											
			Dry Passage	(circle one for ea	ch animal group	)	Ва	rrier Severit	<b>y</b> (circle one for	each animal grou	ıb)								
	Small Mammals, Snakes, Lizards	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier								
	Medium Mammals, Turtles	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier								
	Bobcat, Lynx	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier								
	Bear, Wolf, Coyote, Cougar	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier								
	Deer	none	inadequate	moderately usable moderately	good	excellent	no passage	severe barrier	moderate barrier moderate	minor barrier	no barrier								
	Moose	none	inadequate	usable	dry passage con	excellent	no passage	severe barrier	barrier	minor barrier	no barrier								
	Consider: substrate, dry passage width, height above dry passage, connection to banks, and percent of year dry passage is expected to be available fencing, scour pool, expected persistence of barriers									e ueiviiiidilon,									

	STRUCTURE 2											
_	Outlet Shape 1 2 3 4	5 6 7	FORD	UNKNOW	N REMOV	/ED CLO	GGED/COLL	APSED/SUBME	ERGED			
ATA	Outlet Dimensions (ft.) A. Width	B. He	B. Height C. Substrate/Water Width D. Water Dept						Depth	<b>.</b>		
	E. Abutment Height (Type 7 bridges only) L. Structure Length (Overall length from inlet to outlet)											
<b>S</b>	Inlet Shape 1 2 3 4 5 6 7 FORD UNKNOWN REMOVED CLOGGED/COLLAPSED/SUBMERGED											
CT	Inlet Dimensions (ft.) A. Width B. Height C. Substrate/Water Width D. Water Depth											
TRUCTURE	Clear Line of Sight Through Structure	YES	PARTIAL	NO Co	ontinuous Dry	/ Passage	YES PA	ARTIAL N	NO UNK	NOWN		
S	Miniumum Width of Dry Passage (ft.) Miniumum Height Above Dry Passage (ft.)											
	Dry Passage Substrate SAND/SILT						ucture Comr	nents				
	MITONI CONCRETE MILITAL	T L/\STIC	OTTILIT (DES	CITIBL BLLOV	v) ONNINC	JVVIV						
			Dry Passage	(circle one for e	ach animal group	)	Ва	rrier Severit	<b>y</b> (circle one for	each animal gro	up)	
	Small Mammals, Snakes, Lizards	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Medium Mammals, Turtles	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Bobcat, Lynx	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Bear, Wolf, Coyote, Cougar	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Deer	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Moose	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
		Consider: substra	ate, dry passage wi ear dry passage is e	dth, height above expected to be av	e dry passage, conn ailable	nection to banks,	Consider: inlet fencing, scour	& outlet drops, de bool, expected per	bris/sediment/roo sistence of barrie	ck buildup, structurs	re deformation,	

C	Outlet Shape 1 2 3 4 5 6 7 FORD UNKNOWN REMOVED CLOGGED/COLLAPSED/SUBMERGED											
c	Outlet Dimensions (ft.) A. Width	В. Н	eight	C. :	Substrate/W	ater Width		_ D. Water	Depth			
Е	E. Abutment Height (Type 7 bridges only) L. Structure Length (Overall length from inlet to outlet)											
li	nlet Shape 1 2 3 4	5	6 7	FORD	JNKNOWN	REMOVE	D CLOG	GED/COLLAF	SED/SUBME	RGED		
h	nlet Dimensions (ft.) A. Width	B.	Height	•	C. Substra	te/Water Wid	lth		D. Water Dep	oth		
c	lear Line of Sight Through Structure	YES	PARTIAL	NO Co	ntinuous Dr	y Passage	YES P	ARTIAL N	NO UNK	NOWN		
Clear Line of Sight Through Structure YES PARTIAL NO Continuous Dry Passage YES PARTIAL  Miniumum Width of Dry Passage (ft.)  Miniumum Height Above Dry Passage (ft.)												
	Ory Passage Substrate SAND/SILT RIPRAP CONCRETE METAL						ucture Comments					
		Dry Passage (circle one for each animal group)						rrier Severity (circle one for each animal group)				
	Small Mammals, Snakes, Lizards	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barr	
	Medium Mammals, Turtles	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barr	
	Bobcat, Lynx	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barr	
	Bear, Wolf, Coyote, Cougar	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barri	
	Deer	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barri	
	Moose	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barri	

	STRUCTURE 4											
	Outlet Shape 1 2 3 4 5 6 7 FORD UNKNOWN REMOVED CLOGGED/COLLAPSED/SUBMERGED											
DATA	Outlet Dimensions (ft.) A. Width	<u> </u>	_ D. Water	Depth	<b>.</b>							
	E. Abutment Height (Type 7 bridges only) L. Structure Length (Overall length from inlet to outlet)											
ا ا	Inlet Shape 1 2 3 4 5 6 7 FORD UNKNOWN REMOVED CLOGGED/COLLAPSED/SUBMERGED											
CT	Inlet Shape 1 2 3 4 5 6 7 FORD UNKNOWN REMOVED CLOGGED/COLLAPSED/SUBMERGED Inlet Dimensions (ft.) A. Width B. Height C. Substrate/Water Width D. Water Depth  Clear Line of Sight Through Structure YES PARTIAL NO Continuous Dry Passage YES PARTIAL NO UNKNOWN											
TRU	Clear Line of Sight Through Structure	YES	PARTIAL	NO Co	ontinuous Dry	/ Passage	YES PA	ARTIAL N	IO UNK	NOWN		
S	Miniumum Width of Dry Passage (ft.) Miniumum Height Above Dry Passage (ft.)											
	Dry Passage Substrate SAND/SILT RIPRAP CONCRETE METAL						ructure Comr	nents				
			Dry Passage	(sixela ana fax a	ach animal group	,	Ra	rrier Severit	V (circle and for	asch spimal are	a)	
	Small Mammals, Snakes, Lizards	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Medium Mammals, Turtles	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Bobcat, Lynx	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Bear, Wolf, Coyote, Cougar	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Deer	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Moose	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
		ite, dry passage wi ear dry passage is e	dth, height above expected to be av	, height above dry passage, connection to banks, ected to be available			Consider: inlet & outlet drops, debris/sediment/rock buildup, structure deformation, fencing, scour pool, expected persistence of barriers					

	STRUCTURE 5										
	Outlet Shape 1 2 3 4 5	6 7	FORD	UNKNOWN	REMO\	/ED CLO	GGED/COLL	APSED/SUBME	RGED		
ATA	Outlet Dimensions (ft.) A. Width	C.:	C. Substrate/Water Width D. Water Depth								
Е	E. Abutment Height (Type 7 bridges only) L. Structure Length (Overall length from inlet to outlet)										
U.R.	Inlet Shape 1 2 3 4	5	6 7	FORD	UNKNOWN	REMOVE	D CLOG	GED/COLLAP	SED/SUBME	RGED	
UCT	Inlet Dimensions (ft.) A. Width B. Height C. Substrate/Water Width D. Water Depth										
TR L	Clear Line of Sight Through Structure	YES	PARTIAL	NO <b>Co</b>	ntinuous Dry	/ Passage	YES PA	ARTIAL N	io 🗌 unk	NOWN	
S	Miniumum Width of Dry Passage (ft.)		Min	iumum Heigh	it Above Dry	Passage (ft.)					
	Dry Passage Substrate SAND/SILT	GRAVEL	COBBLE	BOULDER	R BEDRO	CK Str	ucture Comr	nents			
	RIPRAP CONCRETE METAL	PLASTIC	OTHER (DES	CRIBE BELOW	) UNKNO	NKNOWN					
			Drv Passage	(circle one for ea	ch animal group	)	Ва	rrier Severit	<b>V</b> (circle one for	each animal grou	(ar
	Small Mammals, Snakes, Lizards	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier
	Medium Mammals, Turtles	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier
	Bobcat, Lynx	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier
	Bear, Wolf, Coyote, Cougar	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier
	Deer	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier
	Moose	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier
		Consider: substra and percent of ye	te, dry passage w ar dry passage is	idth, height above expected to be ava	dry passage, coni ilable	nection to banks,	Consider: inlet fencing, scour p	& outlet drops, del bool, expected per	oris/sediment/ro sistence of barrie	ck buildup, structur rs	e deformation,

	STRUCTURE 6											
	Outlet Shape 1 2 3 4 5 6 7 FORD UNKNOWN REMOVED CLOGGED/COLLAPSED/SUBMERGED											
DATA	Outlet Dimensions (ft.) A. Width B. Height C. Substrate/Water Width D. Water Depth											
ЕО	E. Abutment Height (Type 7 bridges only) L. Structure Length (Overall length from inlet to outlet)											
2	Inlet Shape 1 2 3 4 5 6 7 FORD UNKNOWN REMOVED CLOGGED/COLLAPSED/SUBMERGED											
CT	Inlet Dimensions (ft.) A. Width B. Height C. Substrate/Water Width D. Water Depth											
TRUCTUR	Clear Line of Sight Through Structure YES PARTIAL NO Continuous Dry Passage YES PARTIAL NO UNKNOWN											
S												
	Dry Passage Substrate SAND/SILT RIPRAP CONCRETE METAL					C	ructure Comr	nents				
			Drv Passage	(circle one for ea	ach animal group	b)	Ва	rrier Severit	<b>V</b> (circle one for	each animal group)		
	Small Mammals, Snakes, Lizards	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Medium Mammals, Turtles	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
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	Deer	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
	Moose	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier	
		Consider: substra	ite, dry passage wi ear dry passage is e	dth, height above expected to be ava	e dry passage, conr ailable	nection to banks,		& outlet drops, de bool, expected per			re deformation,	

9	STRUCTURE 7												
	Outlet Shape 1 2 3 4 5	5 6 7	FORD	UNKNOWN	REMO\	/ED CLO	GGED/COLL	APSED/SUBME	RGED				
DATA	Outlet Dimensions (ft.) A. Width	B. Height C. Substrate/Water Width D. Water Depth							Depth				
ш	E. Abutment Height (Type 7 bridges only) L. Structure Length (Overall length from inlet to outlet)												
Inlet Shape 1 2 3 4 5 6 7 FORD UNKNOWN REMOVED CLOGGED/COLLAPSED/SUBMERGED									RGED				
UCT	Inlet Dimensions (ft.) A. Width B. Height C. Substrate/Water Width D. Water Depth												
TR.	Clear Line of Sight Through Structure YES PARTIAL NO Continuous Dry Passage YES PARTIAL NO UNKNOWN												
10	Miniumum Width of Dry Passage (ft.) Miniumum Height Above Dry Passage (ft.)												
	Dry Passage Substrate SAND/SILT  ■ RIPRAP CONCRETE METAL						ucture Comr	nents					
			Dry Passage	(circle one for ea	ch animal group	)	Ва	rrier Severit	<b>y</b> (circle one for	(circle one for each animal group)			
	Small Mammals, Snakes, Lizards	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier		
	Medium Mammals, Turtles	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier		
	Bobcat, Lynx	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier		
	Bear, Wolf, Coyote, Cougar	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier		
	Deer	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier		
	Moose	none	inadequate	moderately usable	good	excellent	no passage	severe barrier	moderate barrier	minor barrier	no barrier		
		nection to banks,	Consider: inlet & outlet drops, debris/sediment/rock buildup, structure deformation, fencing, scour pool, expected persistence of barriers										

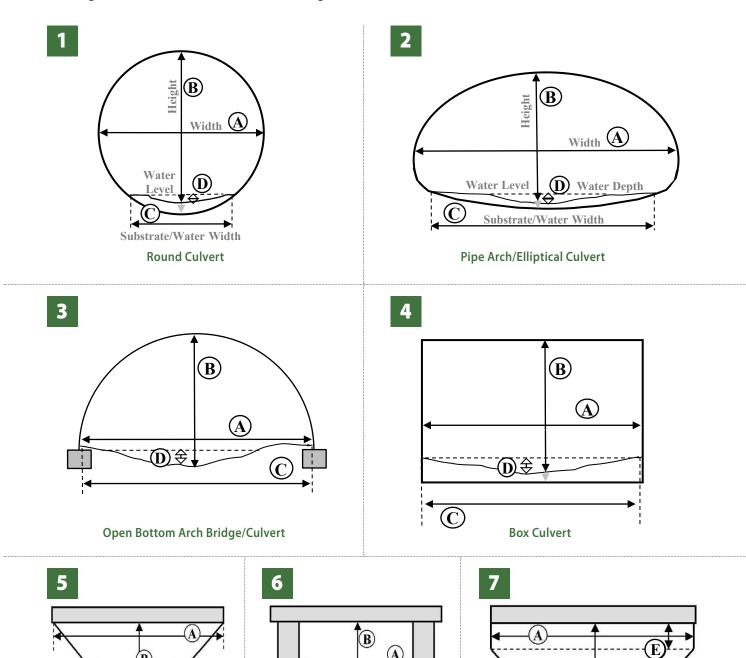
## **Structure Shape & Dimensions**

**Bridge with Side Slopes** 

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- 1) Select the Structure Shape number from the diagrams below and record it on the form for Inlet and Outlet Shape.
- Record on the form in the approriate blanks dimensions A, B, C and D as shown in the diagrams;
   C captures the width of water or substrate, whichever is wider; for dry culverts without substrate, C = 0.
   D is the depth of water -- be sure to measure inside the structure; for dry culverts, D = 0.
- 3) Record Structure Length (L). (Record abutment height (E) only for Type 7 Structures.)
- 4) For multiple culverts, also record the Inlet and Outlet shape and dimensions for each additional culvert.

**NOTE:** Culverts 1, 2 & 4 may or may not have substrate in them, so height measurements (B) are taken from the level of the "stream bed", whether that bed is composed of substrate or just the inside bottom surface of a culvert (grey arrows below show measuring to bottom, black arrows show measuring to substrate).



Box/Bridge with

**Abutments** 

**Bridge with Abutments** 

and Side Slopes