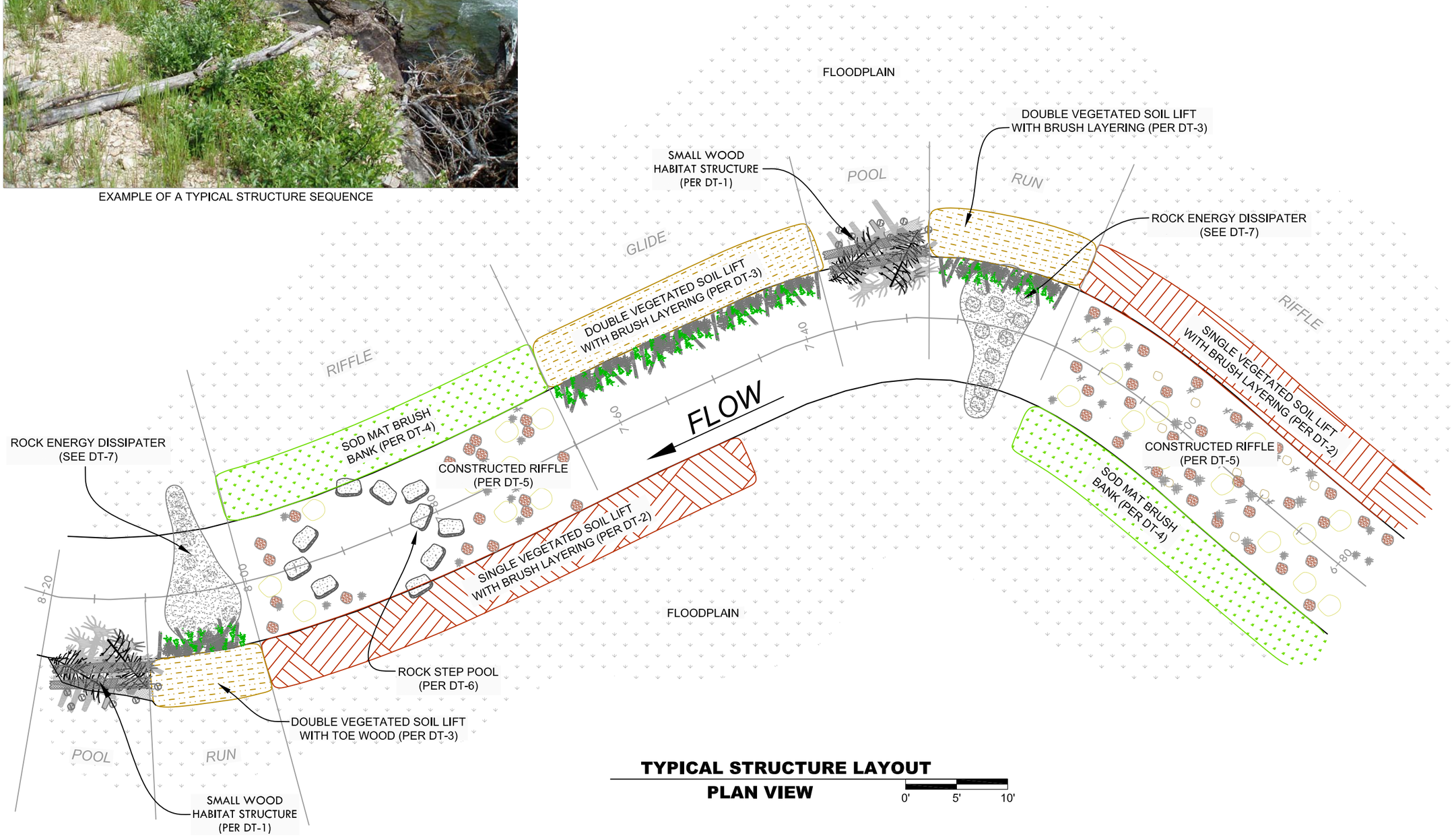
EXAMPLE OF A TYPICAL STRUCTURE SEQUENCE

CONSTRUCTION NOTES

The typical structure layout in DT-8 represents a maximum implementation scenario that will likely only apply to a portion of the project area. Structures may be substituted or altogether eliminated if suitable riparian vegetation exists and is determined to be suitable to maintain channel stability.



TYPICAL STRUCTURE LAYOUT
PLAN VIEW

0' 5' 10'

RIVER DESIGN GROUP, INC.
5098 Hwy 93 South
Whitefish, MT 59937
tel.406.862.4927
fax.406-862-4963
311 SW Jefferson Avenue
Corvallis, OR 97333
tel.541.738.2920
fax.541.738.8324

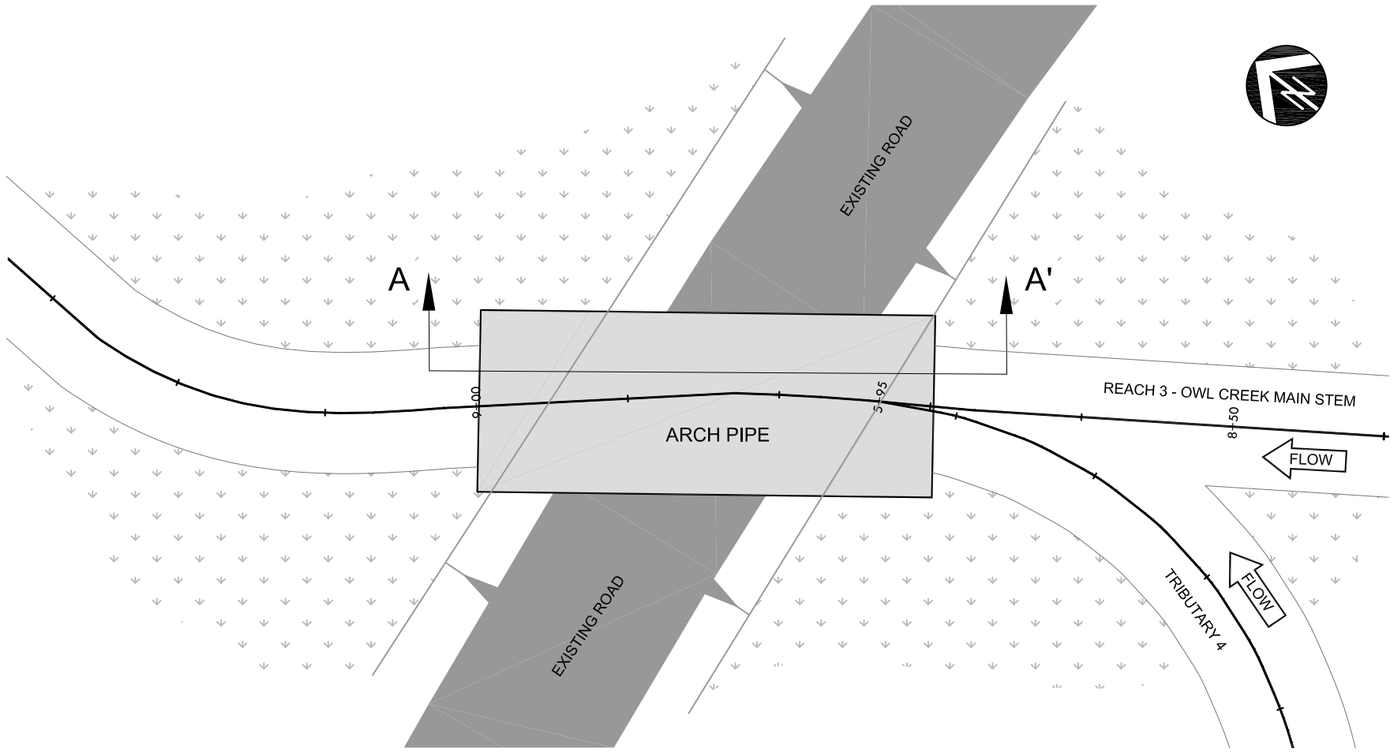
TYPICAL STRUCTURE LAYOUT

Owl Creek Restoration Project
Condon, Montana

NO.	DATE	BY	DESCRIPTION	CHK
1	7-20-11	NW	RESTORATION PLAN	JM

PROJECT NUMBER
RDG-10-068

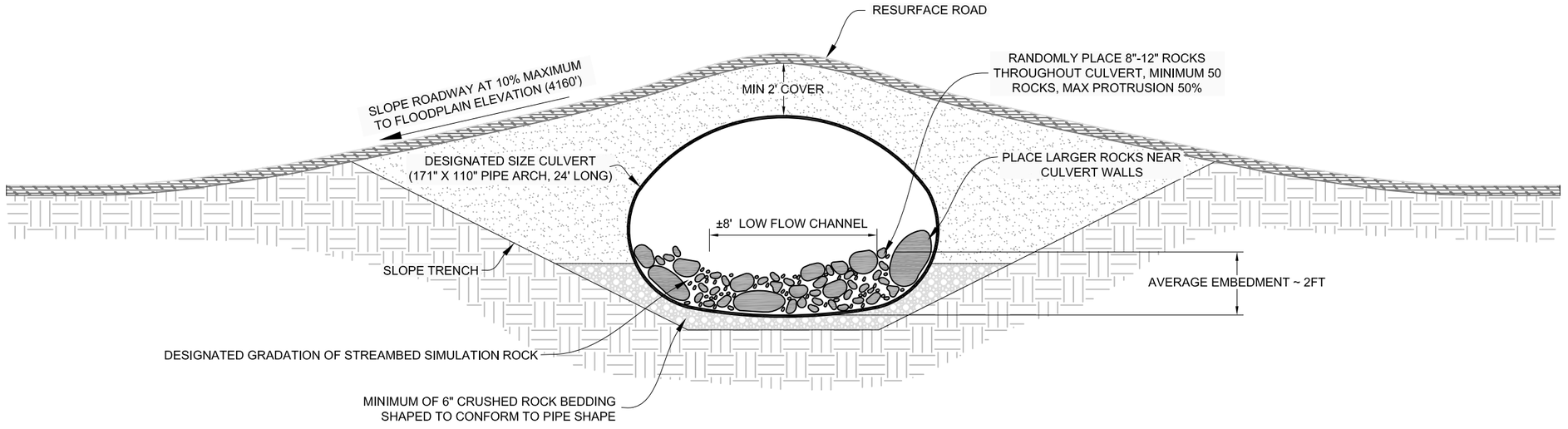
SHEET NUMBER
DT-8



PLAN VIEW

0 5' 10'

EXAMPLE PIPE ARCH STREAM SIMULATION CROSSING



SECTION VIEW
A - A' NTS

RIVER DESIGN GROUP, INC.
5098 Hwy 93 South
Whitefish, MT 59937
tel:406.862.4927
fax:406-862-4963
311 SW Jefferson Avenue
Corvallis, OR 97333
tel:541.738.2920
fax:541.738.8324

STREAM SIMULATION PIPE ARCH CROSSING DETAIL

Owl Creek Restoration Project
Condon, Montana

NO.	DATE	BY	DESCRIPTION	CHK
1	1-10-11	NW	PRELIMINARY DESIGN	JM
2	7-20-11	NW	RESTORATION PLAN	JM

PROJECT NUMBER
RDG-10-068

SHEET NUMBER
DT-9

Category	Item	Quantity	Units	Diameter	Length		
Wood	10"-14" Min. Dia x 6'-8' Footer Logs (#)	76	ea	10 in - 14 in	6 ft - 8 ft		
	12"-20" Min. Dia x 6'-8' Rootwad Logs (#)	76	ea	12 in - 20 in	6 ft - 8 ft		
	6"-12"" Min. Dia x 6' Deflector Logs (#)	57	ea	6 in - 12 in	6 ft		
	3"-6" Min. Dia x 4'-8' Brush (CY)	139	ea	3 in - 6 in	4 ft - 8 ft		
	3"-6" Min. Dia x 8'-10' Brush (CY)	349	ea	3 in - 6 in	8 ft - 10 ft		
	<6" Small Logs (#)	160	ea	less than 6 in			

Category	Item	Quantity	Units
Rock	8" plus Cobble	342	yd^3
	18" RipRap	59	yd^3
	18"-24" boulders	285	ea

Category	Item	Quantity	Units	Width	Length	Thickness	Quantity
BioEngineering	Outer Fabric: Rolanka BioD-Mat90	1,599	lf	9.84 ft	165 ft	0.35 in	2 rolls
	Inner Fabric: Rolanka BioD-Mesh60	1,599	lf	6.67 ft	108 ft	0.35 in	4 rolls
	12" dia Rolanka BioD Roll-S (Coir Log)	145	ea		10 ft	1 ft	15 logs
	6"-12" Sod salvaged	11,108	sf			6 in - 12 in	11,108 sf
	Stakes (#)	727	ea	4 in	18 in	2 in	727 stakes
	Growth Media	98	cy				
	Gravel/Soil Mix	686	cy				
	Willow Cuttings (#)	13,795	ea		36 in	1/4 in	13795 cuttings

Category	Item	Quantity	Units	Diameter	Length
Miscelaneous	24' Arch Pipe (171" span x 110" rise) -16 gage	1	ea	110"	24 ft
	Native Seed (lbs)	25	lbs		

RIVER DESIGN GROUP, INC.

5098 Hwy 93 South
Whitefish, MT 59937
tel.406.862.4927
fax.406-862-4963

311 SW Jefferson Avenue
Corvallis, OR 97333
tel.541.738.2920
fax.541.738.8324

MATERIALS LIST

Owl Creek Restoration Project
Condon, Montana

NO.	DATE	BY	DESCRIPTION	CHK
1	7-20-11	NW	RESTORATION PLAN	JM

PROJECT NUMBER
RDG-10-068

SHEET NUMBER

MT-1