

GENERAL NOTES

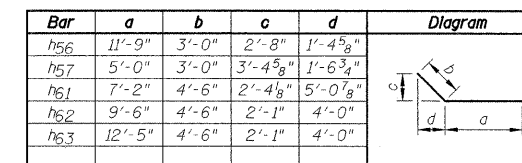
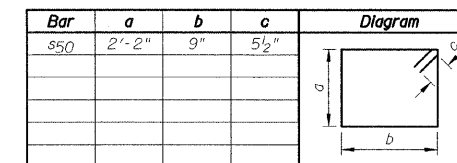
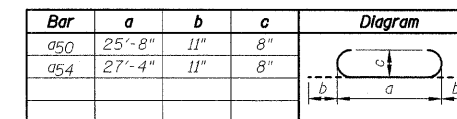
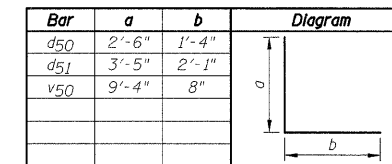
- 1.) At least 6'-0" of this culvert barrel shall be poured monolithically with the wingwalls.
- 2.) Exposed edges shall be beveled 3/4".
- 3.) Reinforcement bars shall conform to the requirements of ASTM A706 Gr. 60. See Special Provision.
- 4.) For backfilling and embankment, see standard specifications and roadway plans.
- 5.) It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included with "Concrete Box Culverts".
- 6.) The Contractor shall field locate and protect all utilities before starting construction. The Contractor shall submit information regarding the protection of all utilities to the Engineer for review.
- 7.) B.F. denotes Back Face and F.F. denotes Front Face.
- 8.) There will be no additional compensation should any reinforcement need to be cut or bent in the field.
- 9.) Where called for, construction joints shall be bonded in accordance with section 503.09 (b) of the Standard Specifications.
- 10.) Layout of the Slope Protection System may be varied to suit ground conditions in the field as directed by the Engineer.
- 11.) Minimum bar lap lengths are as follows, unless noted otherwise.

Barrels:	Bar Size	Min. Lap length	Wingwalls:	Bar Size	Min. Lap Length
	#4	1'-4"		#4	1'-4"
	#5	1'-8"		#5	2'-2"
	#6	2'-0"		#7	3'-5"
	#7	2'-9"		#8	4'-6"
	#8	3'-8"		#9	5'-9"
- 12.) Precast concrete box culverts will not be allowed.
- 13.) The pay item "Removal and Disposal of Unsuitable Material" shall include the excavation of unsuitable material for a depth of 2'-0 1/2" below the structure for a width of approximately 30'-0" within the limits of the toewalls as shown on the plans. The actual quantity shall be determined in the field by the Engineer.
- 14.) The pay item "Porous Granular Embankment, Special" shall include the placement of CA-1 and CA-7 below the structure for a width of approximately 30'-0" within the limits of the toewalls as shown on the plans. The actual quantity shall be determined in the field by the Engineer.

TOTAL BILL OF MATERIAL

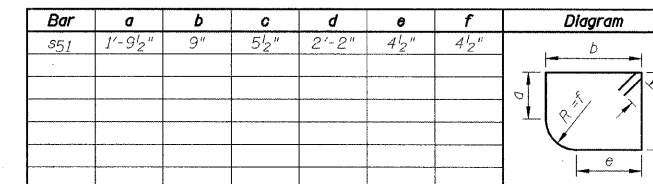
ITEMS	UNITS	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.	111
Porous Granular Embankment, Special	Cu. Yd.	108
Stone Riprap, Class A5	Sq. Yd.	705
Paved Ditch Removal	Foot	255
Removal of Existing Structures No. 2	Each	1
Reinforcement Bars	Pound	41,350
Steel Railing, Type SM	Foot	66
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	169.2

BAR BENDING DIAGRAMS

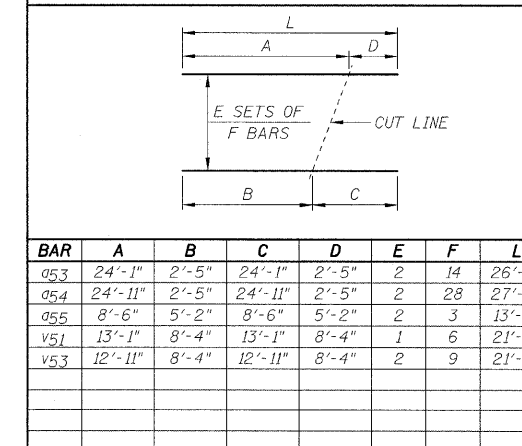


BAR LIST

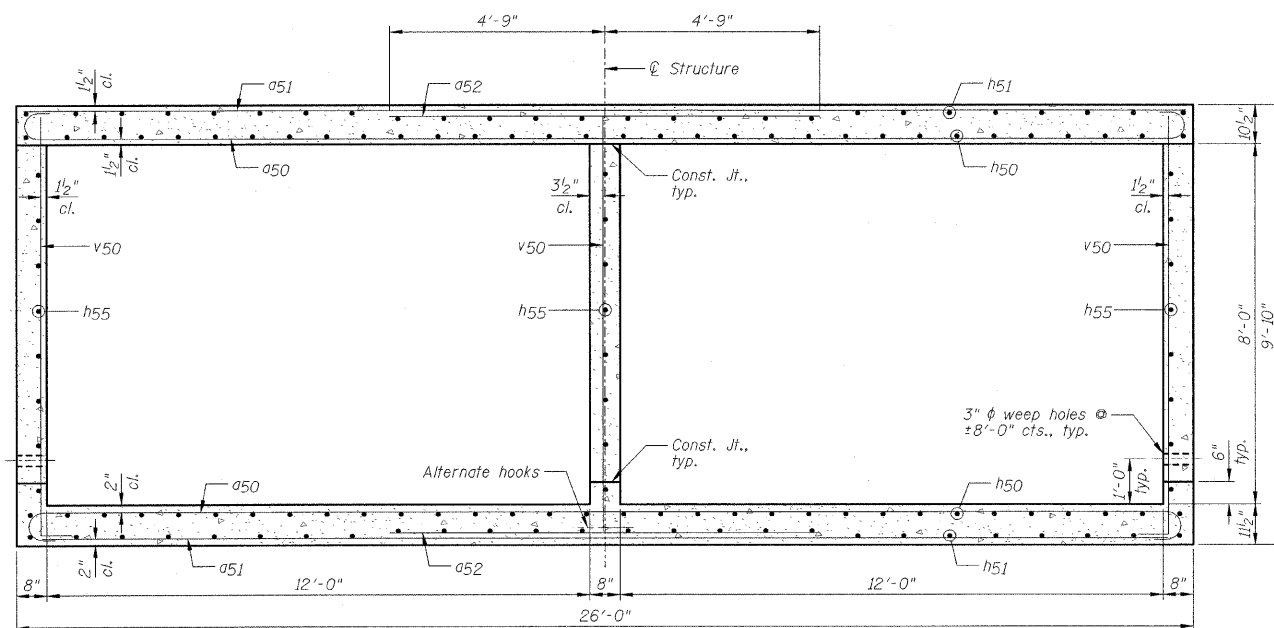
Bar	No.	Size	Length	Shape
d50	106	#8	27'-6"	
d51	54	#8	25'-8"	
d52	72	#8	9'-6"	
d53	28	#8	26'-6"	
d54	56	#8	29'-2"	
d55	6	#8	13'-8"	
d56	6	#4	29'-8"	
d50	50	#4	3'-10"	
d51	62	#7	5'-6"	
h50	128	#7	25'-7"	
h51	156	#5	17'-3"	
h52	4	#6	32'-0"	
h53	4	#4	32'-0"	
h54	4	#8	32'-0"	
h55	48	#6	25'-3"	
h56	22	#8	14'-9"	
h57	20	#8	8'-0"	
h58	12	#8	12'-10"	
h59	24	#8	21'-7"	
h60	18	#6	21'-7"	
h61	8	#8	11'-8"	
h62	22	#8	14'-0"	
h63	14	#6	16'-11"	
h64	14	#8	22'-4"	
h65	10	#6	22'-4"	
s50	32	#5	6'-9"	
s51	32	#5	6'-7"	
v50	189	#4	10'-0"	
v51	6	#4	21'-5"	
v52	32	#4	13'-1"	
v53	18	#4	21'-3"	



BAR CUTTING DIAGRAM



Note: "L" dimension does not take into account the hook length for the hooked bars d54.



SECTION THRU CULVERT

DESIGNED - JML	REVISED -	LIVINGSTON COUNTY DEPARTMENT OF HIGHWAYS	GENERAL DATA		WESTON ROAD (C.H. 10) OVER HICKORY CREEK SECTION 09-00120-03-BR LIVINGSTON, COUNTY STATION 115+00.00	F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
DRAWN - DJM	REVISED -		SCALE:	SHEET NO. B2 OF 8 SHEETS		STA.	TO STA.	349	09-00120-03-BR	LIVINGSTON	34	24
CHECKED - MSW	REVISED -						S.N. 053-5015		CONTRACT NO. 87412			
DATE - 10/21/09	REVISED -						FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			